

Hurricane Sandy Science Projects

For More Information: <http://pubs.usgs.gov/circ/1390/>

Project Listing

Theme 1: Coastal topography and bathymetry.

GS1-1A - Establish a Sandy Region Coastal National Elevation Database (CoNED)

GS1-1B - Topographic surveys (LiDAR) for impact area assessment and reconstruction

GS1-1C - Delivery Systems for Hazards, Topographic, and Bathymetric Elevation Data

GS2-1A - Topographic Surveys: Lidar Elevation Data

Theme 2: Impacts to coastal beaches and barriers.

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GS1-2B - Develop coastal impact forecast models

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GS1-5C - Long term Impact to coastal wetlands and lagoons

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GS1-5F - SET cores

GS1-5G - Surge and Marsh Dieback in the New Jersey

GS1-5H - Assessment of wetland

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GS1-5J - Threatened Shorebird

GS1-5K - Coastal Bird and Other Wildlife Populations

GS1-5L - Coastal Forest Resources of Atlantic Coast DOI Parks and Refuges

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NOAA-101 - Global Model upgrades and ensemble prediction of hurricane tracks

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NOAA-106 - Observing System Experiments

NOAA-107 - Operational Implementation Support

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NOAA-112 - Mapping, Charting & Geodesy Services

NOAA-113 - Mapping, Charting & Geodesy Services

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NOAA-115 - Series 3.5 Engine Upgrade

NOAA-116 - Re-Wing Kit Installation

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NOAA-118 - NWR Facilities

NOAA-119 - NWLON Repair

NOAA-120 - PORTS Repair

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NOAA-122 - Modernizing the Tropical Atmosphere/Ocean Observing System

NOAA-123 - Next Generation Architecture

NOAA-124 - Augmenting Research HPC Resources and Software Engineering

NOAA-125 - LMR Consulting Services

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NOAA-133 - Upper Air

NOAA-134 - NMFS Facilities Maintenance

NOAA-135 - IOOS QUAD

NOAA-136 - Hydrographic Surveys

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NOAA-138 - NWS and NWR/BMH

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NOAA-140 - Nautical Charting Support

NOAA-141 - High Impact Weather Prediction Pilot (HIWPP) Project

NOAA-142 - Develop Improved Predictions of Inland Flooding

NOAA-143 - Evaluating Observing Systems to Improve Storm Prediction

NOAA-144 - Social Science of Storm Risk Communication

NOAA-145 - Behaviorally Realistic Communications to Improve the Public's Response to and Preparedness

NOAA-146 - Assessment of Severe Weather Social Media Usage and a Twitter-based Model

NOAA-147 - Audience Segmentation Analysis of CT Coastal Residents to Support Storm Preparedness

NOAA-148 - Adolescent and Family Decision Making In Time of Disaster

NOAA-149 - Best Practices in Coastal Storm Risk Communication

NOAA-150 - Understanding and Improving Public Response to NWS Coastal Flooding Forecasts

NOAA-151 - Measuring public responses to a surge of information

NOAA-152 - Forecasting evacuation behaviors of coastal communities in response to storm hazard

NOAA-153 - Understanding Responses to Storm Warnings from Those Who "Rode Out" Hurricane

NOAA-154 - Evaluating evacuation decision-making processes among residents of Long Beach, NY

NOAA-155 - NDBC

NOAA-156 - Leveraging European Models

NOAA-157 - Coastal Impact Assistance Program

NOAA-158 - S-NPP Data Processing & Distribution

NOAA-159 - Geostationary Data (GOES-R & International Missions)

NOAA-160 - Direct Readout Imagery from Other Satellites

NOAA-161 - NWS Ground Readiness

NOAA-162 - NWS Data Availability

NOAA-163 - VDatum Upgrades

NOAA-164 - WFO Hardening

NOAA-165 - WFO Repair

NOAA-166 - MRMS Transition to Operations

NOAA-167 - Tropical/Extra-Tropical Storm Surge Warning

NOAA-168 - Storm Surge Training

NOAA-169 - Social Science & Science Infusion Training / DSS Tropical Training

NOAA-170 - Replace coastal monitoring infrastructure at nine reserves affected by Hurricane Sandy

NOAA-171 - Mapping, Charting & Geodesy Services

NOAA-172 - Mapping, Charting & Geodesy Services

NOAA-173 - NEXRAD Dual Pol

NOAA-174 - Operational HPC

NOAA-175 - X-Band Direct Broadcast Receipt Sites

NOAA-176 - Nearshore Wave Prediction System (NWPS)

NOAA-177 - Fisheries Surveys

NOAA-178 - Targeted Observations for High Impact Events

NOAA-179 - Observing System Simulation Experiments for Satellite Data Gap Mitigation

NOAA-180 - DMSP SSMI

NOAA-181 - HPC Hardware Augmentation for OSSEs

NOAA-182 - MADIS

NOAA-183 - Increase Aircraft Observations

NOAA-184 - Seamless Digital Elevation Models

NOAA-185 - NGDC Data Archive and DEMs

NOAA-186 - Stellwagen Bank NMS Pier Repair

NOAA-187 - Leveraging Observations and Models to Improve Predictions of Convective Initiation

NOAA-188 - ASOS

NOAA-189 - Enhanced GRAV-D

NOAA-96 - Avionics Upgrades

NOAA-97 - Extreme Precipitation and Flooding from Atmospheric Rivers

NOAA-98 - SLOSH + Gridded Winds

NOAA-99 - IOCM Processing Center Support

Theme 1: Coastal topography and bathymetry.

GS1-1A - Establish a Sandy Region Coastal National Elevation Database (CoNED)

Project ID: GS1-1A Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Teresa Dean, tdean@usgs.gov, 703-648-4825

Theme: Theme 1: Coastal topography and bathymetry.

Title: GS1-1A: Establish a Sandy Region Coastal National Elevation Database (CoNED)

Summary: Topographic and bathymetric elevation data from multiple sources will be processed and combined with the National Elevation Dataset (NED) to create a seamless and integrated Coastal NED (CoNED) within the Hurricane Sandy impact area. A regional topobathymetric elevation database (CoNED) and derivative products for the entire Sandy impact region will be constructed to serve post-Hurricane Sandy recovery and other needs, including assessing coastal landscape change and vulnerability; designing restoration, redevelopment, and protection projects; predicting future hurricane storm surge, coastal and inland flooding and; devising strategies for climate change adaptation from sea-level rise and other effects. Derivative products include: (1) a Sandy subregion elevation dataset with enhanced vertical accuracy within low-lying extreme inundation hazard zones, (2) high-resolution bare earth LiDAR datasets over vulnerable urbanized zones, (3) a multi-temporal topobathymetric database over geomorphically dynamic coastal subregions, (4) hydrologically enforced and corrected topographic datasets for selected major river basins, and (5) maps that depict Sandy region data gaps in elevation dataset coverage, age, and quality to guide coordinated interagency investments in coastal mapping. The USGS works through the NSTC Interagency Working Group on Ocean and Coastal Mapping (IWG-OCM) to ensure close cooperation with NOAA, USACE, and other relevant agencies.

General: Integrated elevation datasets for the Hurricane Sandy impact region

Focus:

Project Components: This Sandy impact region, along with much of the broader Atlantic and Gulf coastal regions of the United States is vulnerable to hurricane impacts, and lacks the comprehensive integrated onshore – offshore baseline elevation data required for hazard mitigation policies, redevelopment planning, and emergency preparedness and disaster response. This activity directly responds to actions as outlined in the National Ocean Policy Implementation Plan (National Ocean Council, 2012). The USGS led, multi-agency 3DEP initiative outlines an ambitious goal to improve the elevation data for the nation in order to respond to national level government and private sector requirements. The information provided by this proposed project and associated derivative products is essential to development of more resilient communities and robust coastal ecosystem services.

Products/Outcomes: - Regional topobathymetric elevation database for four subregions including New Jersey-Delaware, Chesapeake Bay, New England, North Carolina

Theme 1: Coastal topography and bathymetry.

GS1-1A - Establish a Sandy Region Coastal National Elevation Database (CoNED)

- High-resolution bare earth lidar datasets hydrologically corrected for infrastructure over vulnerable urbanized zones (New York City)
- Hydrologically enforced and corrected topobathymetric datasets for selected major river basins and estuaries (Delaware River, Susquehanna River, Barnegat Bay)
- Multi-temporal topobathymetric databases over geomorphically dynamic coastal subregions (Outer Banks, NC)

Dissemination Strategy: Web access, fact sheets, and direct contact with program coordinator

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input checked="" type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input checked="" type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay
<input checked="" type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input checked="" type="checkbox"/> New York Bight
<input checked="" type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

<input checked="" type="checkbox"/> Bathymetic Survey - Bathymetric Data
<input checked="" type="checkbox"/> Built Environment
<input checked="" type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input type="checkbox"/> Decision Support Tools
<input type="checkbox"/> Green Infrastructure
<input checked="" type="checkbox"/> Immediate Impact Assessment
<input checked="" type="checkbox"/> Increase Monitoring Capability for Future Storms
<input type="checkbox"/> Information Management Data Portals
<input checked="" type="checkbox"/> Long-term Impact Assessment
<input checked="" type="checkbox"/> Modeling Future Impacts
<input checked="" type="checkbox"/> Monitoring Restoration and Management
<input checked="" type="checkbox"/> Resilience Research
<input type="checkbox"/> Social Science
<input checked="" type="checkbox"/> Translation/Delivery of Information to Partners
<input type="checkbox"/> Status
<input checked="" type="checkbox"/> Trends

Theme 1: Coastal topography and bathymetry.

GS1-1A - Establish a Sandy Region Coastal National Elevation Database (CoNED)

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input checked="" type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input checked="" type="checkbox"/> Bathymetric Data	<input checked="" type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input checked="" type="checkbox"/> FEMA	<input checked="" type="checkbox"/> NROC	<input checked="" type="checkbox"/> Elevation Data	<input checked="" type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input checked="" type="checkbox"/> NOAA	<input checked="" type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input checked="" type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input checked="" type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input checked="" type="checkbox"/> Other Federal	<input checked="" type="checkbox"/> NGO	<input checked="" type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input checked="" type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme 1: Coastal topography and bathymetry.

GS1-1B - Topographic surveys (LiDAR) for impact area assessment and reconstruction

Project ID: GS1-1B Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Teresa Dean, tdean@usgs.gov, 703-648-4825

Theme: Theme 1: Coastal topography and bathymetry.

Title: GS1-1B: Topographic surveys (LiDAR) for impact area assessment and reconstruction

Summary: Provide post-Sandy elevation data within the Hurricane Sandy designated impact areas. Collect new elevation data where existing data do not meet recovery, mitigation and assessment requirements. Integrate these new data with other existing elevation data and make it available through the 3D Elevation Program (3DEP). Collect and process LiDAR into elevation models where it does not currently exist within the high impact response areas. Areas with direct impacts (red and purple on map) and in need of data to complete assessments and to support reconstruction activities will be covered with this immediate need data collection activity. Additional funds (total of \$12 - \$14M) will be required to support this need and will be acquired through partnerships with Federal agencies and State governments. The activity are being coordinated with NOAA (co-lead OMB A-16 agency with USGS) and other Federal agencies collecting and managing elevation data through the National Digital Elevation Program steering committee and the NSTC Interagency Working Group on Ocean and Coastal Mapping (IWG-OCM)

General: Acquisition of elevation data (lidar)

Focus: Project and partner support

Project Components: High priority recovery activities that rely on accurate elevation data include the following:• Mapping of coastal areas• Assessment of flood and coastal hazards• Emergency response assessment and planning• Development of plans and site engineering documents to support reconstruction activities• Update sea-level rise assessments and to reflect post-Sandy shoreline conditions• Storm surge inundation predictions over urban areas (particularly NYC) can be validated• Support ecological assessments and other long term science requirements

Products/Outcomes: Classified lidar point cloud data
Bare earth surface - Digital Elevation Model (DEM)
Metadata

Dissemination Strategy: Web access, fact sheets, and direct contact with program coordinator

Project Linkages:

Theme 1: Coastal topography and bathymetry.

GS1-1B - Topographic surveys (LiDAR) for impact area assessment and reconstruction

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input checked="" type="checkbox"/> Chesapaeake Bay
<input checked="" type="checkbox"/> DC	<input checked="" type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input checked="" type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input checked="" type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay
<input checked="" type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays
<input checked="" type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input checked="" type="checkbox"/> New York Bight
<input checked="" type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input checked="" type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State
<input checked="" type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input checked="" type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input checked="" type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input checked="" type="checkbox"/> Elevation Data	<input checked="" type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmnt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme 1: Coastal topography and bathymetry.

GS1-1C - Delivery Systems for Hazards, Topographic, and Bathymetric Elevation Data

Project ID: GS1-1C Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Teresa Dean, tdean@usgs.gov, 703-648-4825

Theme: Theme 1: Coastal topography and bathymetry.

Title: GS1-1C: Delivery Systems for Hazards, Topographic and Bathymetric Elevation Data

Summary: Hurricane Sandy data delivery capabilities will be improved to support requirements for hazards data and for new data collections to be delivered through the Hazards Data Distribution System (HDDS) and the 3D Elevation Program (3DEP) applications that support the ongoing need for assessments, monitoring and planning. For the HDDS, post event disaster imagery planning and acquisition will be expedited by combining near real-time hazard impact assessments with knowledge about populated areas. Data collection areas will be targeted during events and aerial imagery, LiDAR and other data can be quickly acquired. Overall, the result will be a more intelligent tasking of limited resources. The second component of this project will include 3DEP system improvements to provide access to raw LiDAR data and elevation data products from the National Elevation Dataset (NED) and the Coastal NED (CoNED) to support immediate analysis of impacts to coastal and inland areas, for planning recovery and mitigation activities and for supporting site level engineering. The activity will be coordinated with NOAA (co-lead OMB A-16 agency) and other Federal agencies collecting and managing elevation data through the National Digital Elevation Program (NDEP) steering committee and the NSTC Interagency Working Group on Ocean and Coastal Mapping (IWG-OCM).

General: Improvement and increased capacity for data delivery systems and quality assurance processes.

Focus:

Project Components:

- Hazards Data Distribution System (HDDS) model outputs and real-time data feeds will be used to provide rapid situational awareness. This system will allow immediate visibility to the requirements collection process during events to reduce response times and minimize the loss of life and damage to infrastructure and natural systems.
- The HDDS area of interest model will employ geospatial analytics to identify those areas (i.e. bridges, dams, critical infrastructure, highly populated areas) that may warrant satellite monitoring.
- Improved topographic and bathymetric data delivery will support the demanding needs during an emergency response and over the long term as assessments, planning, and reconstruction and other recovery functions are performed. Emergency response professionals will benefit from increased productivity and avoidance of duplicative work during critical response and assessments periods.
- The USGS and NOAA services will be coordinated to provide the long term stable access to topographic and bathymetric data (to include LiDAR point cloud and derivative

Theme 1: Coastal topography and bathymetry.

GS1-1C - Delivery Systems for Hazards, Topographic, and Bathymetric Elevation Data

data) that will be necessary to support Hurricane Sandy recovery activities and future emergency response needs.

Products/Outcomes:

Dissemination Strategy: Web access, fact sheets, and direct contact with program coordinator

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
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<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme 1: Coastal topography and bathymetry.

GS1-1C - Delivery Systems for Hazards, Topographic, and Bathymetric Elevation Data

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
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<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
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<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input checked="" type="checkbox"/> Elevation Data	<input checked="" type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme 1: Coastal topography and bathymetry.

GS2-1A - Topographic Surveys: Lidar Elevation Data

Project ID: GS2-1A Agency ID: 82 Lead Agency: USGS Project Duration (Yrs): 2

Contact: Teresa Dean, tdean@usgs.gov, 703-648-4825

Theme: Theme 1: Coastal topography and bathymetry.

Title: GS2-1A: Topographic Surveys: Lidar Elevation Data

Summary: This project includes the collection of topographic lidar elevation data to support the assessment, recovery, and mitigation requirements for priority watershed and ecosystem analyses in the Hurricane Sandy impact area that were not fully addressed with the first round of funding.

General: Elevation data for selected priority areas

Focus: Project and partner support

Project Components: High-priority recovery activities that rely on accurate topographic lidar elevation data include the following: (1) Mapping of watersheds and flood prone areas, (2) assessment of flood hazards, coastal erosion, landscape change, and vulnerability, (3) Evaluation of watersheds, water quality, and ecosystem health, (4) development of plans to support watershed mitigation activities, (5) design of restoration, redevelopment, and protection projects, (6) assessments of dune, forest, and wetland structure and ecosystem vulnerability.

Products/Outcomes: Classified lidar point cloud data
Bare earth surface - Digital Elevation Model (DEM)
Metadata

Dissemination Strategy: Web access, fact sheets, and direct contact with program coordinator

Project Linkages:

Theme 1: Coastal topography and bathymetry.

GS2-1A - Topographic Surveys: Lidar Elevation Data

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme 2: Impacts to coastal beaches and barriers.

GS1-2A - Pre- and post-storm mapping of coastal impacts and vulnerability

Project ID: GS1-2A Agency ID: Lead Agency: USGS Project Duration (Yrs): 1

Contact: John Haines, jhaines@usgs.gov, 703-648-6422

Theme: Theme 2: Impacts to coastal beaches and barriers.

Title: GS1-2A: Coastal Mapping Products & Impact Assessments: Pre- and post-storm mapping of coastal impacts and vulnerability

Summary: USGS pre- and post-storm coastal mapping provides critical data to assess Sandy impacts to coastal barriers and to characterize post-Sandy coastal conditions and vulnerability. USGS completed post-Sandy airborne LiDAR and photographic surveys, including surveys at the request of DOI/NPS and NJ State agencies. Subsequently surveys were conducted by the USACE and NOAA. These and other anticipated surveys far exceed current capacity for processing and analyses to deliver high-priority products and support recovery applications. This project will a) process all such data collected by the USGS or at the behest of DOI bureaus, b) develop digital interpretive products that document coastal change (e.g. overwash and debris distribution, dune/beach loss, habitat modification, channel migration and elevation change) and characterize the post-storm condition of coastal resources, and c) conceptualize and build specialized interpretive products from NOAA, USACE and other data sources as required by response and recovery operations. The USGS will, as part of this effort, develop hardware and software to ensure that capacity for rapid provision of data, products and assessments is enhanced prior to future storm events.

General: Processing of LIDAR and other data for maps of post-sandy geology

Focus: Assess damage and inform responses

Project Components: Without the processing and product generation proposed herein DOI bureaus, the NDRF Natural and Cultural Resources response teams, and state agencies will not have access to reliable information on the extent of Sandy impacts and the condition of coastal resources post-Sandy. Absent this information it will not be possible to quantify post-Sandy vulnerability of resources, or assess the requirements, costs, and effectiveness of proposed actions to rebuild coastal beaches, dunes and other coastal protection structures to enhance resilience to future storms and long-term coastal change. Project data and products are essential to set priorities and evaluate proposed response and recovery actions. As co-chair of the NSTC Interagency Working Group on Coastal and Ocean Mapping (IWG-OCM), the USGS will ensure additional data collection and development of data processing and delivery capabilities is coordinated across agencies and reflects DOI interests. The USGS will engage DOI bureaus, the NDRF response teams, and state agencies to set project priorities.

Products/Outcomes:

Theme 2: Impacts to coastal beaches and barriers.

GS1-2A - Pre- and post-storm mapping of coastal impacts and vulnerability

Dissemination Strategy: Data access through project coordinator; fact sheets and scientific reports (USGS reports, journals, symposia)

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input type="checkbox"/> Chesapeake Bay
<input checked="" type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay
<input checked="" type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input checked="" type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

<input checked="" type="checkbox"/> Bathymetric Survey - Bathymetric Data
<input type="checkbox"/> Built Environment
<input checked="" type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input checked="" type="checkbox"/> Decision Support Tools
<input type="checkbox"/> Green Infrastructure
<input checked="" type="checkbox"/> Immediate Impact Assessment
<input type="checkbox"/> Increase Monitoring Capability for Future Storms
<input checked="" type="checkbox"/> Information Management Data Portals
<input checked="" type="checkbox"/> Long-term Impact Assessment
<input type="checkbox"/> Modeling Future Impacts
<input type="checkbox"/> Monitoring Restoration and Management
<input checked="" type="checkbox"/> Resilience Research
<input type="checkbox"/> Social Science
<input checked="" type="checkbox"/> Translation/Delivery of Information to Partners
<input checked="" type="checkbox"/> Status
<input type="checkbox"/> Trends

Project Partners:

Federal	Other
<input checked="" type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input checked="" type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State
<input checked="" type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input checked="" type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local
<input checked="" type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input checked="" type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input checked="" type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> Infrastructure	<input checked="" type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input checked="" type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input checked="" type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input checked="" type="checkbox"/> Vegetation

Theme 2: Impacts to coastal beaches and barriers.

GS1-2B - Develop coastal impact forecast models

Project ID: GS1-2B Agency ID: Lead Agency: USGS Project Duration (Yrs): 1

Contact: John Haines, jhaines@usgs.gov, 703-648-6422

Theme: Theme 2: Impacts to coastal beaches and barriers.

Title: GS1-2B: Impacts to and Vulnerability of Coastal Beaches: Develop coastal impact forecast models

Summary: The Nation’s coast is fringed by beaches, dunes, barrier islands and wetlands. These features provide the first barrier to storm impacts and influence the vulnerability of adjacent lands, waters, living resources and people. Their ability to provide essential benefits and services, and to mitigate the impact of future storms, erosion, and sea-level rise, should inform decisions on recovery and rebuilding. The proposed analyses, assessments, and tools are essential to evaluating and setting priorities for proposed response and recovery actions. They will provide emergency responders and coastal managers with credible forecasts of the potential impacts of future storms on coastal beaches and barriers and of the effects of recovery and mitigation actions and future development on coastal vulnerability and resilience. This knowledge can be used to identify areas most vulnerable to impacts of future storms so as to effectively direct response and recovery resources before and in the immediate aftermath of storms. In order to make effective decisions, coastal managers and planners need knowledge of the current and future configuration of coastal barrier systems and of how coastal vulnerability evolves as a consequence of barrier response to future storms, erosion, and sea-level rise. Integrating economic, demographic, and infrastructure characteristics into assessments will allow risk to be factored into coastal management and planning.

General:

Focus:

Project Components: USGS predictions of coastal change from hurricanes provide critical information to identify areas vulnerable to extreme, and potentially catastrophic, erosion during landfall. Using post-Sandy LiDAR elevation data and forecasts of waves and surge, the USGS will provide updated vulnerability assessments of Northeast beaches to future impacts from “model” storms. Proposed and alternative rebuilding efforts (such as dune restoration) can be included in vulnerability assessments to evaluate efficacy. Additionally, National Climate Assessment scenarios for future sea level rise will be incorporated to examine corresponding changes in vulnerability. The USGS will make updated assessments and GIS data layers widely available to users through various online systems, such as the USGS Coastal Change Hazards portal, NOAA’s Digital Coast, and data.gov. The post-Sandy LiDAR data will also be used to update historic rates of shoreline retreat and to quantify the impact of the storm on the beaches in the region, including magnitudes of shoreline, dune, and beach erosion. These analyses will also be

Theme 2: Impacts to coastal beaches and barriers.

GS1-2B - Develop coastal impact forecast models

used to identify the type of coastal change and to verify the accuracy of the pre-landfall predictions of coastal change (figure). The data from Sandy and past storms will be used to improve the accuracy and impact of the coastal change forecasts. Improvements may include the prediction of magnitudes of erosion and the inland extent of overwash, as well as the effects of the built environment on storm response. Social, economic, and infrastructure/critical facility elements will be added to assessments to facilitate dialogue on societal risk and decision-making to reduce risk.

Products/Outcomes:

Dissemination Strategy: Data access through project coordinator; fact sheets and scientific reports (USGS reports, journals, symposia)

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input checked="" type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
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<input type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input checked="" type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

<input checked="" type="checkbox"/>	Bathymetic Survey - Bathymetric Data
<input checked="" type="checkbox"/>	Built Environment
<input checked="" type="checkbox"/>	Collect/Process Elevation Data Including LiDAR
<input checked="" type="checkbox"/>	Decision Support Tools
<input type="checkbox"/>	Green Infrastructure
<input checked="" type="checkbox"/>	Immediate Impact Assessment
<input type="checkbox"/>	Increase Monitoring Capability for Future Storms
<input checked="" type="checkbox"/>	Information Management Data Portals
<input checked="" type="checkbox"/>	Long-term Impact Assessment
<input checked="" type="checkbox"/>	Modeling Future Impacts
<input type="checkbox"/>	Monitoring Restoration and Management
<input type="checkbox"/>	Resilience Research
<input checked="" type="checkbox"/>	Social Science
<input checked="" type="checkbox"/>	Translation/Delivery of Information to Partners
<input checked="" type="checkbox"/>	Status
<input type="checkbox"/>	Trends

Theme 2: Impacts to coastal beaches and barriers.

GS1-2B - Develop coastal impact forecast models

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input checked="" type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input checked="" type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input checked="" type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input checked="" type="checkbox"/> Infrastructure	<input checked="" type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input checked="" type="checkbox"/> Geology
<input checked="" type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input checked="" type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input checked="" type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input checked="" type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmt System
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local	<input checked="" type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input checked="" type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input checked="" type="checkbox"/> Vulnerability to storm surge	<input checked="" type="checkbox"/> Surge-Wave-Tide
	<input checked="" type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input checked="" type="checkbox"/> Vegetation

Theme 2: Impacts to coastal beaches and barriers.

GS1-2C - Coastal Hazards Information and Decision Support Portal

Project ID: GS1-2C Agency ID: Lead Agency: USGS Project Duration (Yrs): 1

Contact: John Haines, jhaines@usgs.gov, 703-648-6422

Theme: Theme 2: Impacts to coastal beaches and barriers.

Title: GS1-2C: Coastal Hazards Information and Decision Support Portal: Provide web-access and delivery of coastal impact assessments and data

Summary: USGS scientists will work with informatics specialists and software engineers at the USGS Center for Integrated Data Analytics (which develops and deploys information technology products for a wide range of federal, state and international groups) to create an online portal for data and tools to assess coastal change vulnerability and apply USGS data and analyses to immediate and specific needs. The portal will provide direct access for coastal stakeholders to assessments of potential storm and sea-level change impacts on our Nation's coasts, as well as tools to assess rates of shoreline change and probabilities of erosion during storms and due to long-term sea-level rise. The existing USGS Digital Shoreline Analysis System(DSAS) is the community-standard for estimating and visualizing rates of shoreline change. DSAS will serve as the framework for an expanded coastal change hazards portal. A functional portal can be rapidly stood-up and populated with existing data and analyses, such as shoreline positions and rates of change, pre- and post-Sandy storm vulnerability assessments based on dune heights, storm surge elevations, and wave conditions, and regional assessments of sea-level rise vulnerability. As additional Sandy-specific analyses of coastal erosion and vulnerability to future storms are completed, they will be added to the portal. An ancillary effort provide enhanced access to USGS information relevant to offshore sand resources in response to BOEM requirements and other needs.

General: Coastal erosion data portal

Focus: Northeast Wide

Project Components: • Hazards Data Distribution System (HDDS) model outputs and real-time data feeds will be used to provide rapid situational awareness. This system will allow immediate visibility to the requirements collection process during events to reduce response times and minimize the loss of life and damage to infrastructure and natural systems. • The HDDS area of interest model will employ geospatial analytics to identify those areas (i.e. bridges, dams, critical infrastructure, highly populated areas) that may warrant satellite monitoring. • Improved topographic and bathymetric data delivery will support the demanding needs during an emergency response and over the long term as assessments, planning, and reconstruction and other recovery functions are performed. Emergency response professionals will benefit from increased productivity and avoidance of duplicative work during critical response and assessments periods. • The USGS and NOAA services will be coordinated to provide the long term stable access to

Theme 2: Impacts to coastal beaches and barriers.

GS1-2C - Coastal Hazards Information and Decision Support Portal

topographic and bathymetric data (to include LiDAR point cloud and derivative data) that will be necessary to support Hurricane Sandy recovery activities and future emergency response needs.

Products/Outcomes:

Dissemination Strategy: Data access through project coordinator; fact sheets and scientific reports (USGS reports, journals, symposia)

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input checked="" type="checkbox"/> Chesapaeake Bay
<input checked="" type="checkbox"/> DC	<input checked="" type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input checked="" type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay
<input checked="" type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input checked="" type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetric Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme 2: Impacts to coastal beaches and barriers.

GS1-2C - Coastal Hazards Information and Decision Support Portal

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input checked="" type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input checked="" type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input checked="" type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input checked="" type="checkbox"/> Geology
<input checked="" type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input checked="" type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmt System
<input checked="" type="checkbox"/> USGS	<input checked="" type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input checked="" type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input checked="" type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme 2: Impacts to coastal beaches and barriers.

GS2-2A - Assateague Barrier Island and Estuarine Wetland Physical Change Assessment

Project ID: GS2-2A Agency ID: 26 Lead Agency: USGS Project Duration (Yrs): 2

Contact: John Haines, jhaines@usgs.gov, 703-648-6422

Theme: Theme 2: Impacts to coastal beaches and barriers.

Title: GS2-2A: Wetland Physical Assessment: Assateague Barrier Island and Estuarine Wetland Physical Change Assessment

Summary: This project will measure estuarine and barrier island wetland physical change (shoreline and interior) using data sets derived from remote sensing, aerial imagery, lidar, water-level gages, and sediment cores to develop a comprehensive impact assessment of Assateague Island and the associated estuarine shoreline. Resulting data will support development of a combined shoreline and wetland forecast of coastal vulnerability to future storm events, expanding the applicability of available USGS regional and national tools to marsh/wetland shorelines.

General: Erosion and sediment supply

Focus: Assateague wetland and estuary

Project Components: Project will measure estuarine and barrier island wetland physical change (marsh shoreline and interior) using data sets derived from remote sensing, aerial imagery, lidar, water-level gages, and sediment cores to develop a comprehensive impact assessment of Assateague Island and the associated estuarine shoreline. Resulting data will support development of a combined shoreline and wetland forecast of coastal vulnerability to future storm events, expanding the applicability of available USGS regional and national tools to include marsh/wetland shorelines

Products/Outcomes:

Dissemination Strategy: Data access through project coordinator; fact sheets and scientific reports (USGS reports, journals, symposia)

Project Linkages:

Theme 2: Impacts to coastal beaches and barriers.

GS2-2A - Assateague Barrier Island and Estuarine Wetland Physical Change Assessment

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
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<input type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input checked="" type="checkbox"/> Other

Science Category:

<input checked="" type="checkbox"/> Bathymetic Survey - Bathymetric Data
<input checked="" type="checkbox"/> Built Environment
<input checked="" type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input checked="" type="checkbox"/> Decision Support Tools
<input type="checkbox"/> Green Infrastructure
<input checked="" type="checkbox"/> Immediate Impact Assessment
<input type="checkbox"/> Increase Monitoring Capability for Future Storms
<input checked="" type="checkbox"/> Information Management Data Portals
<input type="checkbox"/> Long-term Impact Assessment
<input checked="" type="checkbox"/> Modeling Future Impacts
<input type="checkbox"/> Monitoring Restoration and Management
<input checked="" type="checkbox"/> Resilience Research
<input type="checkbox"/> Social Science
<input checked="" type="checkbox"/> Translation/Delivery of Information to Partners
<input checked="" type="checkbox"/> Status
<input checked="" type="checkbox"/> Trends

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local
<input checked="" type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input checked="" type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input checked="" type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input checked="" type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> Infrastructure	<input checked="" type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input checked="" type="checkbox"/> Geology
<input checked="" type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input checked="" type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmnt System
<input checked="" type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input checked="" type="checkbox"/> Vulnerability to storm surge	<input checked="" type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input checked="" type="checkbox"/> Vegetation

Theme 2: Impacts to coastal beaches and barriers.

GS2-2B - Fire Island Regional Study

Project ID: GS2-2B **Agency ID:** 29 **Lead Agency:** USGS **Project Duration (Yrs):** 2

Contact: John Haines, jhaines@usgs.gov, 703-648-6422

Theme: Theme 2: Impacts to coastal beaches and barriers.

Title: GS2-2B: FireIsland: Linking Coastal Processes and Vulnerability – Fire Island Regional Study

Summary: Building on extensive scientific knowledge of the Long Island barrier island system evolution and behavior, this project will fill crucial knowledge and data gaps required to develop models that predict change and vulnerability caused by storms, climate (sea-level rise), and human activities on management-relevant time scales.

General: Breach assessment

Focus: Fire Island

Project Components: During Hurricane Sandy, a breach formed at the eastern end of Fire Island. Breaches and formation of tidal inlets are the most consequential storm effects and a critical process of barrier island maintenance for the long-term resiliency and recovery of the system. This new inlet provides a unique opportunity to study the morphodynamic evolution of a breach in conjunction with other post-Sandy activities to inform models of future behavior and storm response. By using existing and new data on the geology, long-term coastal change, and sediment transport processes, this project will 1) integrate breach monitoring data to be collected in collaboration with the National Park Service and USACE to develop a morphodynamic model of the breach and assess the effects of the breach on the resiliency of the barrier system; and generate maps, data, and predictive models to forecast beach evolution and vulnerability and future inlet susceptibility.

Products/Outcomes:

Dissemination Strategy: Data access through project coordinator; fact sheets and scientific reports (USGS reports, journals, symposia)

Project Linkages:

Theme 2: Impacts to coastal beaches and barriers.

GS2-2B - Fire Island Regional Study

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island
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<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input checked="" type="checkbox"/> Other

Science Category:

<input checked="" type="checkbox"/> Bathymetic Survey - Bathymetric Data
<input type="checkbox"/> Built Environment
<input type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input checked="" type="checkbox"/> Decision Support Tools
<input type="checkbox"/> Green Infrastructure
<input checked="" type="checkbox"/> Immediate Impact Assessment
<input checked="" type="checkbox"/> Increase Monitoring Capability for Future Storms
<input type="checkbox"/> Information Management Data Portals
<input type="checkbox"/> Long-term Impact Assessment
<input checked="" type="checkbox"/> Modeling Future Impacts
<input type="checkbox"/> Monitoring Restoration and Management
<input checked="" type="checkbox"/> Resilience Research
<input type="checkbox"/> Social Science
<input checked="" type="checkbox"/> Translation/Delivery of Information to Partners
<input checked="" type="checkbox"/> Status
<input checked="" type="checkbox"/> Trends

Project Partners:

Federal	Other
<input checked="" type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input checked="" type="checkbox"/> NPS	<input checked="" type="checkbox"/> State FWS
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local
<input checked="" type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input checked="" type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input checked="" type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input checked="" type="checkbox"/> Geology
<input checked="" type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmnt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input checked="" type="checkbox"/> Vulnerability to storm surge	<input checked="" type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input checked="" type="checkbox"/> Vegetation

Theme 2: Impacts to coastal beaches and barriers.

GS2-2C - Assateague Island Regional Study

Project ID: GS2-2C Agency ID: 41 Lead Agency: USGS Project Duration (Yrs): 2

Contact: John Haines, jhaines@usgs.gov, 703-648-6422

Theme: Theme 2: Impacts to coastal beaches and barriers.

Title: GS2-2C: Assateague: Linking Coastal Processes and Vulnerability – Assateague Island Regional Study

Summary: This project involves mapping of the regional geologic framework and describing the physical processes governing the evolution of the Delmarva coastal system, which includes Assateague Island. Efforts will produce actionable information for improving the resilience of coastal habitat and infrastructure to future storms and sea-level rise.

General: Coastal sediment budget

Focus: Delmarva Peninsula

Project Components: Results from this project will improve the understanding of the coastal sediment budget, its driving processes, and effects on short- and long-term coastal vulnerability. This information has immediate and direct application to habitat management and infrastructure planning (NPS, FWS, and other Federal, non-Federal, and private agencies); beach nourishment and rebuilding of coastal dunes (USACE); and storm vulnerability (FEMA). The project will contribute to management decisions outlined in General Management Plans and Comprehensive Conservation Plans. In addition, research activities identified and prioritized by partners and partnerships will support the landscape-level conservation needs identified by the Landscape Conservation Cooperatives (LCCs).

Products/Outcomes:

Dissemination Strategy: Data access through project coordinator; fact sheets and scientific reports (USGS reports, journals, symposia)

Project Linkages:

Theme 2: Impacts to coastal beaches and barriers.

GS2-2C - Assateague Island Regional Study

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme 2: Impacts to coastal beaches and barriers.

GS2-2D - Estuarine physical response to storms

Project ID: GS2-2D Agency ID: 22 Lead Agency: USGS Project Duration (Yrs): 2

Contact: John Haines, jhaines@usgs.gov, 703-648-6422

Theme: Theme 2: Impacts to coastal beaches and barriers.

Title: GS2-2D: EstuarinePhysicalResponse: Estuarine physical response to storms

Summary: This project will measure and model estuarine and adjacent wetland sediment responses to Hurricane Sandy and future storms in two large Atlantic lagoonal estuaries. Evaluations of sediment transport, geomorphic change, circulation, wetland stability, and stratigraphic history will support development of models of storm impacts on estuarine health, vulnerability of adjacent communities, and sustainability of restored and natural wetlands.

General: Wetland and lagoon sediment transport

Focus:

Project Components: The project enables better planning and resiliency with respect to extreme water levels by providing a range of potential water-level changes during storm and barrier-island breach scenarios. It provides data for wetland vulnerability assessments (lateral erosion, wave attack, and sediment supply), basic time-series data for characterizing lagoonal estuaries, and historical context for geomorphic change of lagoonal estuaries and adjacent marshes over decadal timescales to help understand the effect of prior storm events.

Products/Outcomes:

Dissemination Strategy: Data access through project coordinator; fact sheets and scientific reports (USGS reports, journals, symposia)

Project Linkages:

Theme 2: Impacts to coastal beaches and barriers.

GS2-2D - Estuarine physical response to storms

Project Locations:		Science Category:
States	Waterbodies and Areas	
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapeake Bay	<input type="checkbox"/> Bathymetric Survey - Bathymetric Data
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay	<input type="checkbox"/> Built Environment
<input checked="" type="checkbox"/> DE	<input type="checkbox"/> Fire Island	<input type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine	<input checked="" type="checkbox"/> Decision Support Tools
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River	<input type="checkbox"/> Green Infrastructure
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay	<input checked="" type="checkbox"/> Immediate Impact Assessment
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays	<input type="checkbox"/> Increase Monitoring Capability for Future Storms
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound	<input checked="" type="checkbox"/> Information Management Data Portals
<input checked="" type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays	<input checked="" type="checkbox"/> Long-term Impact Assessment
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight	<input checked="" type="checkbox"/> Modeling Future Impacts
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays	<input type="checkbox"/> Monitoring Restoration and Management
<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor	<input checked="" type="checkbox"/> Resilience Research
<input checked="" type="checkbox"/> VA	<input type="checkbox"/> Southern New England	<input type="checkbox"/> Social Science
	<input checked="" type="checkbox"/> Other	<input type="checkbox"/> Translation/Delivery of Information to Partners
		<input checked="" type="checkbox"/> Status
		<input checked="" type="checkbox"/> Trends

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input checked="" type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input checked="" type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input checked="" type="checkbox"/> Demographics	<input checked="" type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input checked="" type="checkbox"/> Infrastructure	<input checked="" type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input checked="" type="checkbox"/> Long-term verification Data	<input checked="" type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input checked="" type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input checked="" type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input checked="" type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local	<input checked="" type="checkbox"/> Uncertainty assessment data	<input checked="" type="checkbox"/> Wind-Precip-Temp
<input checked="" type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input checked="" type="checkbox"/> Vulnerability to storm surge	<input checked="" type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input checked="" type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input checked="" type="checkbox"/> Vegetation

Theme 3: Impacts of storm surge and estuarine and bay hydrology.

GS1-3A - Storm Surge Response, Data Collection, and Data Delivery

Project ID: GS1-3A Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Robert Mason, rrmason@usgs.gov, 703-648-5305

Theme: Theme 3: Impacts of storm surge and estuarine and bay hydrology.

Title: GS1-3A: Storm Surge Response, Data Collection, and Data Delivery: Develop, enhance, and equip USGS Storm-Tide Centers to facilitate rapid-deployment and manage real-time storm tide and hydrologic monitoring networks. Improve real-time and historical storm tide data access and rapid delivery of tide, surge, and other hydrologic data.

Summary: USGS storm tide monitoring and data collection are a critical part of the emergency response and resource allocation decision support system before, during, and immediately after landfall of hurricanes and Nor'easters. Delivering storm tide monitoring data in an easily accessible manner and as rapidly as possible is critical to local emergency responders and FEMA. Storm tide data transmitted to emergency responders on a real time basis and other hydrologic and meteorological data collected after the event together provide a complete picture of the extent and magnitude of the storm impact on coastal land features and near-coast assets and infrastructure. Maintenance and delivery of the quality-assured surge data are important to USACE and NOAA modelers in efforts to improve planning and forecast models. This project will: (1) enhance existing USGS storm surge capabilities by establishing a storm-surge operations center in the Northeast and Mid-Atlantic where storm-surge vulnerability exists as a result of hurricanes, their remnants, and Nor'easters, (2) increase the number and mobility of water-level and water-quality sensors in staging areas for rapid deployment to areas forecast to be vulnerable to storm surge, (3) increase the amount of real-time and near real-time storm surge data that are available to emergency responders, and (4) improve the data delivery and display system used to provide real-time and recovered data to emergency responders, community planners, forecasters, and modelers.

General:

Focus:

Project Components: Establishing coordination in the Northeast with adequate equipment and trained staff will better support northeast and mid-Atlantic emergency responders. All centers will be equipped with adequate monitoring and recovery instrumentation to accommodate the population centers located in their respective service areas. Real-time transmission and other capabilities will be enhanced to better meet emergency response needs before and during the storm events. During and after emergency events created by hurricanes and Nor'easters, responders and planners need a unified and consistent source of real time and archived storm surge data. The USGS Storm Tide Mapper is widely used by other agencies for viewing, analyzing, and accessing storm tide data. The Mapper will be improved

Theme 3: Impacts of storm surge and estuarine and bay hydrology.

GS1-3A - Storm Surge Response, Data Collection, and Data Delivery

to decrease delivery time and make the data more easily accessible to responders, planners, and the public and a more permanent solution for data delivery and access will be implemented.

Products/Outcomes:

Dissemination Strategy: New web drivers for easy data access of network data; fact sheets on network; USGS reports and journals.

Project Linkages: Funded by and partnering with USACE to acquire storm surge and wave data. Collaborating with FEMA and NOAA on network design and data analysis

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input checked="" type="checkbox"/> Chesapeake Bay
<input checked="" type="checkbox"/> DC	<input checked="" type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input checked="" type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input checked="" type="checkbox"/> Hudson River
<input checked="" type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay
<input checked="" type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays
<input checked="" type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input checked="" type="checkbox"/> New York Bight
<input checked="" type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetric Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme 3: Impacts of storm surge and estuarine and bay hydrology.

GS1-3A - Storm Surge Response, Data Collection, and Data Delivery

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input checked="" type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input checked="" type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input checked="" type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input checked="" type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State	<input checked="" type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input checked="" type="checkbox"/> NOAA	<input checked="" type="checkbox"/> State CZM	<input checked="" type="checkbox"/> Sea Level Rise	<input checked="" type="checkbox"/> Hydrology
<input checked="" type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input checked="" type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmt System
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local	<input checked="" type="checkbox"/> Uncertainty assessment data	<input checked="" type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input checked="" type="checkbox"/> Vulnerability to storm surge	<input checked="" type="checkbox"/> Surge-Wave-Tide
Local EMA;	<input checked="" type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input checked="" type="checkbox"/> Water Quality
Transp; Public		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
Safety;			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme 3: Impacts of storm surge and estuarine and bay hydrology.

GS1-3B - Storm Tide Monitoring Networks and Data Analysis

Project ID: GS1-3B Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Robert Mason, rrmason@usgs.gov, 703-648-5305

Theme: Theme 3: Impacts of storm surge and estuarine and bay hydrology.

Title: GS1-3B: Storm Tide Monitoring Networks and Data Analysis: Refurbish and enhance fixed-station, rapid-deployment, mobile targeted, and hydrodynamic assessment storm tide networks to facilitate more efficient deployment and recovery and support forecast modeling. Networks would provide real-time and storm extent and magnitude documentation, meet emergency needs, facilitate a scientific understanding of storm surge characteristics near coastal features and built structures, and support modeling improvement.

Summary: Fixed-place storm tide monitoring networks are established prior to landfall, designed to measure the hydrologic impacts of the storm as it approaches and passes over the coastline and moves inland, and use a combination of long-term tide gages and deployed sensors at selected locations to measure the extent and magnitude of storm tide, wave heights, and meteorological parameters. Mobile monitoring networks supplement existing fixed-place networks by collecting data that meet specific scientific analysis needs created by the characteristics of the hurricane or Nor'easter and can be used to meet a request from state and local emergency responders as a result of evacuation difficulties or failing infrastructure. Federal land and cultural managers also may have a need for a mobile station network to assist them with managing holdings. The impacts of water-induced storm surge on coastal land features and built structures is a direct result of the energy created by velocity and the angle of its impact. USGS hydroacoustics capabilities provide the opportunity to measure the velocity and direction of the water as it approaches the coastal and, along with existing and compatible data collected through remote sensing means, to better understand the land impacts. This project will: (1) analyze network density and model uncertainty, (2) with stakeholder input, pre-establish fixed-place and define rapidly deployable storm tide networks along the Atlantic and other vulnerable coastal areas which fill data gaps, meet local response data needs, and systematically reduce forecast model uncertainty, (3) establish the capability to deploy a network of sensors to meet water-level, flow, and quality data needs during emergency situations and provide detailed observations of water and wind impacts on built structures and natural features, and (4) collect water velocity and directional data during storms in selected areas along the coast to improve the definition of bay, estuary, and(or) river channel flows.

General:

Focus:

Project Components: A defined network of fixed-place equipment or locations will allow a more rapid deployment, more efficient recovery of recorded data, and better establishment

Theme 3: Impacts of storm surge and estuarine and bay hydrology.

GS1-3B - Storm Tide Monitoring Networks and Data Analysis

of a preliminary database, while reducing overall costs. Mobile networks will benefit emergency responders by providing a flexible deployment alternative that will allow USGS response to emergency situations where water-level monitoring is critical. Data collected from the network stations will benefit the modeling and scientific communities by supporting the improvement of planning and forecasting models. The measurement of water movement in coastal environments, bays, estuaries, and river channels will benefit storm surge model accuracy. The scientific support studies will benefit land managers, both Federal and local, as they make plans to create more resilient landscapes.

Products/Outcomes:

Dissemination Strategy: New web drivers for easy data access of network data; fact sheets on network; USGS reports and journals.

Project Linkages: Funded by and partnering with USACE to acquire storm surge and wave data. Collaborating with FEMA and NOAA on network design and data analysis

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input checked="" type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input checked="" type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input checked="" type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input checked="" type="checkbox"/> Hudson River
<input checked="" type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay
<input checked="" type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays
<input checked="" type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input checked="" type="checkbox"/> New York Bight
<input checked="" type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme 3: Impacts of storm surge and estuarine and bay hydrology.

GS1-3B - Storm Tide Monitoring Networks and Data Analysis

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input checked="" type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input checked="" type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input checked="" type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input checked="" type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input checked="" type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input checked="" type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input checked="" type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input checked="" type="checkbox"/> Sea Level Rise	<input checked="" type="checkbox"/> Hydrology
<input checked="" type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input checked="" type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmt System
<input checked="" type="checkbox"/> USGS	<input checked="" type="checkbox"/> Local	<input checked="" type="checkbox"/> Uncertainty assessment data	<input checked="" type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input checked="" type="checkbox"/> Vulnerability to storm surge	<input checked="" type="checkbox"/> Surge-Wave-Tide
Local EMA;	<input checked="" type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input checked="" type="checkbox"/> Water Quality
Transp; Public		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
Safety; Tribes			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme 3: Impacts of storm surge and estuarine and bay hydrology.

GS2-3A - Enhance Storm Tide Monitoring, Data Recovery, and Data Display Capabilities

Project ID: GS2-3A Agency ID: 80 Lead Agency: USGS Project Duration (Yrs): 2

Contact: Robert Mason, rrmason@usgs.gov, 703-648-5305

Theme: Theme 3: Impacts of storm surge and estuarine and bay hydrology.

Title: GS2-3A: Enhance Storm Tide Monitoring, Data Recovery, and Data Display Capabilities

Summary: This project will increase the ability of the U.S. Geological Survey (USGS) to recover recorded storm surge time-series data in a more timely and efficient manner, implement a coastal and near inland fixed-place storm surge network, and establish rapid-response capabilities for targeted monitoring.

General:

Focus:

Project Components: Data rapidly collected from the network stations will help emergency managers direct response efforts and allocate important resources. FEMA and other emergency management agencies need storm tide data that are accurate and delivered quickly during and after storm surge events. The measurement of water movement in coastal environments, bays, estuaries, and river channels will improve storm-surge model accuracy by the USACE, NOAA, and scientific institutions developing forecasting models, planning tools, and scientific analyses of storm surge impacts. Products will benefit land managers, both Federal and local, in creating more resilient landscapes. Land managers such as the National Park Service (NPS), U.S. Fish and Wildlife Service (USFWS), State agencies and community planners need focused and scientifically based storm tide data to develop strategies to temporarily manage damaged lands, develop viable and successful restoration plans, and to prepare for the next hurricane landfall.

Products/Outcomes:

Dissemination Strategy: New web drivers for easy data access of network data; fact sheets on network; USGS reports and journals.

Project Linkages: Funded by and partnering with USACE to acquire storm surge and wave data. Collaborating with FEMA and NOAA on network design and data analysis

Theme 3: Impacts of storm surge and estuarine and bay hydrology.

GS2-3A - Enhance Storm Tide Monitoring, Data Recovery, and Data Display Capabilities

Project Locations:		Science Category:
States	Waterbodies and Areas	
<input checked="" type="checkbox"/> CT	<input checked="" type="checkbox"/> Chesapeake Bay	<input type="checkbox"/> Bathymetric Survey - Bathymetric Data
<input type="checkbox"/> DC	<input checked="" type="checkbox"/> Delaware Bay	<input type="checkbox"/> Built Environment
<input checked="" type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island	<input type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input checked="" type="checkbox"/> MA	<input checked="" type="checkbox"/> Gulf of Maine	<input type="checkbox"/> Decision Support Tools
<input checked="" type="checkbox"/> MD	<input checked="" type="checkbox"/> Hudson River	<input type="checkbox"/> Green Infrastructure
<input checked="" type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay	<input type="checkbox"/> Immediate Impact Assessment
<input type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays	<input checked="" type="checkbox"/> Increase Monitoring Capability for Future Storms
<input checked="" type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound	<input checked="" type="checkbox"/> Information Management Data Portals
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays	<input checked="" type="checkbox"/> Long-term Impact Assessment
<input checked="" type="checkbox"/> NY	<input checked="" type="checkbox"/> New York Bight	<input checked="" type="checkbox"/> Modeling Future Impacts
<input checked="" type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays	<input checked="" type="checkbox"/> Monitoring Restoration and Management
<input checked="" type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor	<input type="checkbox"/> Resilience Research
<input checked="" type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England	<input type="checkbox"/> Social Science
	<input type="checkbox"/> Other	<input type="checkbox"/> Translation/Delivery of Information to Partners
		<input checked="" type="checkbox"/> Status
		<input checked="" type="checkbox"/> Trends

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input checked="" type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input checked="" type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input checked="" type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input checked="" type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input checked="" type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input checked="" type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input checked="" type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input checked="" type="checkbox"/> Sea Level Rise	<input checked="" type="checkbox"/> Hydrology
<input checked="" type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input checked="" type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmt System
<input checked="" type="checkbox"/> USGS	<input checked="" type="checkbox"/> Local	<input checked="" type="checkbox"/> Uncertainty assessment data	<input checked="" type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input checked="" type="checkbox"/> Vulnerability to storm surge	<input checked="" type="checkbox"/> Surge-Wave-Tide
Emergency managers; Tribes	<input checked="" type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input checked="" type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme 3: Impacts of storm surge and estuarine and bay hydrology.

GS2-3B - Storm Surge Science Evaluations to Improve Models

Project ID: GS2-3B Agency ID: 19 Lead Agency: USGS Project Duration (Yrs): 2

Contact: Robert Mason, rrmason@usgs.gov, 703-648-5305

Theme: Theme 3: Impacts of storm surge and estuarine and bay hydrology.

Title: GS2-3B: Storm Surge Science Evaluations to Improve Models, Vulnerability Assessments, and Storm Surge Predictions

Summary: This project will support existing storm-surge modeling efforts by other agencies and universities. It will establish resilient platforms for storm surge and wave measurements along several transects from edge of water through beach and wetland to near-coast environments to monitor storm processes and assess inundation potential. The effectiveness of differing landscapes, built and natural, in mitigating storm impacts will be defined and mapped, and data will be delivered to improve storm-surge models.

General:

Focus:

Project Components: The design of this study complements and extends the investments made possible by supplemental funding already received for topographic and bathymetric mapping, supports USGS proposals GS2-2A and GS2-2D, and allows the USGS to address specific local needs while also ensuring that regional questions of scientific importance are addressed. The USGS will provide data from these studies to the USACE, NOAA, and others to improve (1) storm surge models, (2) maps of coastline vulnerability and barrier island breach potential, (3) plans for resilient infrastructure rebuilding, and (4) strategies for emergency evacuations. The USGS expects to deliver improvements to the accuracy of storm surge and inundation forecasts based on surge and wave runup data collected in this study and to storm surge and inundation forecasts based on land-use-type and coastal morphology data collected in this study at sites shown to affect surge and wave runup.

Products/Outcomes:

Dissemination Strategy: New web drivers for easy data access of network data; fact sheets on network; USGS reports and journals.

Project Linkages: Funded by and partnering with USACE to acquire storm surge and wave data. Collaborating with FEMA and NOAA on network design and data analysis

Theme 3: Impacts of storm surge and estuarine and bay hydrology.

GS2-3B - Storm Surge Science Evaluations to Improve Models

Project Locations:		Science Category:
States	Waterbodies and Areas	
<input checked="" type="checkbox"/> CT	<input checked="" type="checkbox"/> Chesapeake Bay	<input type="checkbox"/> Bathymetric Survey - Bathymetric Data
<input type="checkbox"/> DC	<input checked="" type="checkbox"/> Delaware Bay	<input type="checkbox"/> Built Environment
<input checked="" type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island	<input type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input checked="" type="checkbox"/> MA	<input checked="" type="checkbox"/> Gulf of Maine	<input type="checkbox"/> Decision Support Tools
<input checked="" type="checkbox"/> MD	<input checked="" type="checkbox"/> Hudson River	<input type="checkbox"/> Green Infrastructure
<input checked="" type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay	<input type="checkbox"/> Immediate Impact Assessment
<input type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays	<input checked="" type="checkbox"/> Increase Monitoring Capability for Future Storms
<input checked="" type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound	<input checked="" type="checkbox"/> Information Management Data Portals
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays	<input checked="" type="checkbox"/> Long-term Impact Assessment
<input checked="" type="checkbox"/> NY	<input checked="" type="checkbox"/> New York Bight	<input checked="" type="checkbox"/> Modeling Future Impacts
<input checked="" type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays	<input checked="" type="checkbox"/> Monitoring Restoration and Management
<input checked="" type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor	<input type="checkbox"/> Resilience Research
<input checked="" type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England	<input type="checkbox"/> Social Science
	<input type="checkbox"/> Other	<input type="checkbox"/> Translation/Delivery of Information to Partners
		<input checked="" type="checkbox"/> Status
		<input checked="" type="checkbox"/> Trends

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input checked="" type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input checked="" type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input checked="" type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input checked="" type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input checked="" type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input checked="" type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input checked="" type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input checked="" type="checkbox"/> Sea Level Rise	<input checked="" type="checkbox"/> Hydrology
<input checked="" type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input checked="" type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmt System
<input checked="" type="checkbox"/> USGS	<input checked="" type="checkbox"/> Local	<input checked="" type="checkbox"/> Uncertainty assessment data	<input checked="" type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input checked="" type="checkbox"/> Vulnerability to storm surge	<input checked="" type="checkbox"/> Surge-Wave-Tide
Emergency Managers, Tribes	<input checked="" type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input checked="" type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme 4: Impacts on environmental quality and persisting contaminant exposures.

GS1-4A - Characterize Persisting Threat of Ecological Exposures to Storm-Related Contaminants

Project ID: GS1-4A Agency ID: Lead Agency: USGS Project Duration (Yrs): 3

Contact: Mike Focazio, mfocazio@usgs.gov, 703-648-6808

Theme: Theme 4: Impacts on environmental quality and persisting contaminant exposures.

Title: GS1-4A: Characterize Persisting Threat of Ecological Exposures to Storm-Related Contaminants in Coastal and Aquatic Environments.

Summary: Assess the long-term threats to aquatic ecosystems many months and years beyond the aftermath of the storm. Approach includes comparison of sediment and fish tissue chemistry for targeted contaminants at key locations including several where baseline data exist before the storm.

General: Long term ecological threats due to contaminants

Focus:

Project Components: Sediment chemistry. Fish (young-of-year bluefish and mussel) tissue chemistry. Before/after storm comparisons. Linkages to specific contaminant sources due to compromised or destroyed infrastructure (e.g. wastewater treatment plants, chemical storage facilities, etc.).

Products/Outcomes: Journal articles, databases, USGS reports.

Dissemination Strategy: Peer-reviewed journals, Web-based databases, USGS report series.

Project Linkages: Parks, Commercial Fisheries, Ecologists, State Environmental Departments, Long-Term Mussel Monitoring, Municipal/On-Site Wastewater, Long-Term Water and Sediment Monitoring

Theme 4: Impacts on environmental quality and persisting contaminant exposures.

GS1-4A - Characterize Persisting Threat of Ecological Exposures to Storm-Related Contaminants

Project Locations:		Science Category:
States	Waterbodies and Areas	
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay	<input checked="" type="checkbox"/> Bathymetic Survey - Bathymetric Data
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay	<input checked="" type="checkbox"/> Built Environment
<input type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island	<input checked="" type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine	<input type="checkbox"/> Decision Support Tools
<input type="checkbox"/> MD	<input type="checkbox"/> Hudson River	<input type="checkbox"/> Green Infrastructure
<input type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay	<input type="checkbox"/> Immediate Impact Assessment
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays	<input checked="" type="checkbox"/> Increase Monitoring Capability for Future Storms
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound	<input type="checkbox"/> Information Management Data Portals
<input checked="" type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays	<input checked="" type="checkbox"/> Long-term Impact Assessment
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight	<input type="checkbox"/> Modeling Future Impacts
<input type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays	<input type="checkbox"/> Monitoring Restoration and Management
<input type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor	<input checked="" type="checkbox"/> Resilience Research
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England	<input type="checkbox"/> Social Science
	<input type="checkbox"/> Other	<input type="checkbox"/> Translation/Delivery of Information to Partners
		<input checked="" type="checkbox"/> Status
		<input type="checkbox"/> Trends

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input checked="" type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input checked="" type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input checked="" type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input checked="" type="checkbox"/> Coastal water movement	<input checked="" type="checkbox"/> Contaminants
<input checked="" type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input checked="" type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State	<input checked="" type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input checked="" type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmnt System
<input checked="" type="checkbox"/> USGS	<input checked="" type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input checked="" type="checkbox"/> University	<input checked="" type="checkbox"/> Ecosystem Response Data	<input checked="" type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input checked="" type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme 4: Impacts on environmental quality and persisting contaminant exposures.

GS1-4B - Characterize Persisting Threat of Human Exposures to Storm-Related Contaminants

Project ID: GS1-4B Agency ID: Lead Agency: USGS Project Duration (Yrs): 3

Contact: Mike Focazio, mfocazio@usgs.gov, 703-648-6808

Theme: Theme 4: Impacts on environmental quality and persisting contaminant exposures.

Title: GS1-4B: Characterize Persisting Threat of Human Exposures to Storm-Related Contaminants in the Built Environment

Summary: First responders assessed and mitigated the short-term threats associated with contaminants released in the immediate aftermath of the storm. This project takes the next step in looking at the longer-term threats that may have been created and could remain.

General: Long-term threats of human exposures to contaminants

Focus:

Project Components: We are assessing dredge spoils that have been placed in near shore environments, beaches and other areas easily accessed by the public.

Products/Outcomes: Journal articles, USGS reports, data.

Dissemination Strategy: Web-based data, journals, USGS publication series

Project Linkages: Public health agencies, beach erosion restoration agencies, parks and recreation

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme 4: Impacts on environmental quality and persisting contaminant exposures.

GS1-4B - Characterize Persisting Threat of Human Exposures to Storm-Related Contaminants

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input checked="" type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input checked="" type="checkbox"/> Coastal water movement	<input checked="" type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input checked="" type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input checked="" type="checkbox"/> Infrastructure	<input checked="" type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State	<input checked="" type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input checked="" type="checkbox"/> USGS	<input checked="" type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input checked="" type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-1 - Decision Support to Increase Resiliency of Tidal Wetland Habitats and Species

Project ID: FWS-1 Agency ID: 24 Lead Agency: FWS Project Duration (Yrs): 3

Contact: Andrew Milliken, andrew_milliken@fws.gov, 413-253-8269

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: Decision Support for Hurricane Sandy Restoration and Future Conservation to Increase Resiliency of Tidal Wetland Habitats and Species in the Face of Storms and Sea Level Rise

Summary: Coordinated effort by Landscape Conservation Cooperative (LCC) partners to integrate existing data, models and tools with foundational data and impact assessments to guide decisions about where to conduct tidal marsh restoration, conservation and management to sustain ecological values, ecosystem services, habitat suitability and resiliency of tidal marshes and marsh species in the face of storm impacts, sea level rise and other stressors.

General: Tidal marshes in Sandy Impacted Area

Focus: Initial focus in NY and NJ

Project Components: (1) Compile and summarize initial results of assessments of impacts of Hurricane Sandy on tidal marshes and marsh-dependent species. (2) Compile regionally-consistent spatial data including elevation, tidal, restrictions, ditches, and hardened structures. (3) Monitor and assess the effectiveness of tidal wetland restorations completed in response to Hurricane Sandy for increasing resiliency of marshes and marsh species to future storms and sea level rise and use this information to develop best management practices for future restorations and prioritize locations with the highest likelihood of success. (4) Develop models for understanding future impacts of sea level rise and storms on tidal marshes along with other stressors such as urban growth to address critical management decisions for increasing resiliency through marsh restoration, management and protection at regional and local scales. (5) Incorporate models for sea-level rise and storms into the North Atlantic Landscape Conservation Cooperative (LCC) modeling framework "Designing Sustainable Landscapes" throughout the Northeast Region in combination with other predicted effects of climate change, urban growth, conservation and management on tidal wetlands and adjacent uplands to understand combined habitat and species impacts and thereby guide decision making across a number of goals. (6) Provide decision support tools, maps, models and monitoring results available to decision makers at scales and formats needed and provide capacity to work with partners to use this information at the regional, state and local level.

Products/Outcomes: Completion of decision support models for tidal wetlands and tidal wetland species that is used DOI and other partners for decisions on future wetland management, restoration and protection; A coordinated monitoring program that evaluates and determines the effectiveness of marsh restoration in

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-1 - Decision Support to Increase Resiliency of Tidal Wetland Habitats and Species

increasing persistence and resiliency of tidal marsh habitats and species; and availability and use of these results and tools by partners at regional, state and local scales

Dissemination Strategy: LCC Data Portal, grants and capacity to deliver information to communities

Project Linkages: foundational data, impact assessments and modeling being completed by USGS for DOI resiliency funding including Wetland Physical Change Assessment, Estuarine Assessment, Wetland Ecosystem Functions and Processes, Bird Responses and Vulnerability and Forecasting Ecological Impacts of Storms

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input checked="" type="checkbox"/> Chesapaeake Bay
<input checked="" type="checkbox"/> DC	<input checked="" type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input checked="" type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input checked="" type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays
<input checked="" type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input checked="" type="checkbox"/> New York Bight
<input checked="" type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-1 - Decision Support to Increase Resiliency of Tidal Wetland Habitats and Species

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input checked="" type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input checked="" type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input checked="" type="checkbox"/> LCC	<input checked="" type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input checked="" type="checkbox"/> MARCO	<input checked="" type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input checked="" type="checkbox"/> NROC	<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> FWS	<input checked="" type="checkbox"/> SHARP	<input checked="" type="checkbox"/> Infrastructure	<input checked="" type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State	<input checked="" type="checkbox"/> Long-term verification Data	<input checked="" type="checkbox"/> Geology
<input checked="" type="checkbox"/> NOAA	<input checked="" type="checkbox"/> State CZM	<input checked="" type="checkbox"/> Sea Level Rise	<input checked="" type="checkbox"/> Hydrology
<input checked="" type="checkbox"/> NPS	<input checked="" type="checkbox"/> State FWS	<input checked="" type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmt System
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local	<input checked="" type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input checked="" type="checkbox"/> Other Federal	<input checked="" type="checkbox"/> NGO	<input checked="" type="checkbox"/> Vulnerability to storm surge	<input checked="" type="checkbox"/> Surge-Wave-Tide
	<input checked="" type="checkbox"/> University	<input checked="" type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input checked="" type="checkbox"/> Wildlife	<input checked="" type="checkbox"/> Wildlife
			<input checked="" type="checkbox"/> Fish
			<input checked="" type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-2 - Decision Support to Increase Resiliency of Beach Habitats and Beach-Dependent Species

Project ID: FWS-2 Agency ID: 67 Lead Agency: FWS Project Duration (Yrs): 3

Contact: Andrew Milliken, andrew_milliken@fws.gov, 413-253-8269

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: Decision Support for Hurricane Sandy Restoration and Future Conservation to Increase Resiliency of Beach Habitats and Beach-Dependent Species in the Face of Storms and Sea Level Rise

Summary: Coordinated effort by Landscape Conservation Cooperative (LCC) partners to integrate existing data, models and tools with foundational data and assessments of both the impacts of Hurricane Sandy and the immediate response to guide decisions about where to conduct what beach restoration, management and conservation actions to sustain ecological function, habitat suitability for wildlife and ecosystem services including flood abatement in the face of storm impacts and sea level rise.

General: Coastal beaches in impacted area

Focus: Initial focus in NY and NJ

Project Components: (1) Integrate existing information and models and develop decision support tools for understanding future impacts of sea level rise and storms on coastal beaches that can be used to make critical management decisions for increasing resiliency and habitat suitability through beach restoration, management and protection at regional and local scales. (2) Incorporate models of beach response to sea-level rise and storms into the North Atlantic LCC modeling framework along with other predicted effects of climate change, urban growth and conservation to understand combined habitat impacts and guide decision making across a number of disciplines. (3) Assess the effectiveness of beach nourishment and other stabilization activities completed in response to Hurricane Sandy for increasing resiliency of beach habitats to future storms and sea level rise and sustaining beach-dependent wildlife species and use this assessment to refine best management practices for future restorations and prioritize approaches and locations with the highest likelihood of success. (4) Collect and model beach-nesting bird location and habitat data on and adjacent to key coastal National Wildlife Refuges from Maine to Virginia to provide finer-scale projections of habitat changes. (5) Make decision support tools, maps and monitoring results easily available to decision makers at scales and formats needed through the LCC data portal; work with partners to translate and use information at the regional, state and local level and enhance existing capacity to work with communities.

Products/Outcomes: Populate decision models with species and habitat data from past and ongoing studies and from remote sensing. Collect and incorporate data on species distribution and habitat at sites where beach stabilization is ongoing or imminent. Extend recent inventory of inlet and beach modifications to the Northeast using

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-2 - Decision Support to Increase Resiliency of Beach Habitats and Beach-Dependent Species

consistent methods to provide a comprehensive assessment of baseline conditions. Complete refinement and development of response modeling and species-habitat models, incorporate final models into decision framework, incorporate information into data portal, initiate post-restoration monitoring, deliver information and tools through workshops, training and delivery network.

Dissemination Strategy: LCC Data Portal, grants and capacity to deliver information to communities

Project Linkages: This project complements, utilizes and integrates foundational data, impact assessments and modeling being completed by USGS for DOI mitigation funding including Bird Responses and Vulnerability, Forecasting Ecological Impacts of Storms, Impacts and Vulnerability of Coastal Beaches, Fire Island, and Assateague projects

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input checked="" type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input checked="" type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input checked="" type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input checked="" type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays
<input checked="" type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input checked="" type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-2 - Decision Support to Increase Resiliency of Beach Habitats and Beach-Dependent Species

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input checked="" type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input checked="" type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input checked="" type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input checked="" type="checkbox"/> LCC	<input checked="" type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input checked="" type="checkbox"/> MARCO	<input checked="" type="checkbox"/> Demographics	<input checked="" type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input checked="" type="checkbox"/> NROC	<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input checked="" type="checkbox"/> Infrastructure	<input checked="" type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input checked="" type="checkbox"/> Geology
<input checked="" type="checkbox"/> NOAA	<input checked="" type="checkbox"/> State CZM	<input checked="" type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input checked="" type="checkbox"/> NPS	<input checked="" type="checkbox"/> State FWS	<input checked="" type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmt System
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local	<input checked="" type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input checked="" type="checkbox"/> Other Federal	<input checked="" type="checkbox"/> NGO	<input checked="" type="checkbox"/> Vulnerability to storm surge	<input checked="" type="checkbox"/> Surge-Wave-Tide
	<input checked="" type="checkbox"/> University	<input checked="" type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input checked="" type="checkbox"/> Wildlife	<input checked="" type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-3 - Coastal Barrier Resources System Comprehensive Map Modernization

Project ID: FWS-3 Agency ID: 64 Lead Agency: FWS Project Duration (Yrs): 3

Contact: Gary Frazer, gary_frazer@fws.gov, 202-208-4646

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: Coastal Barrier Resources System Comprehensive Map Modernization - Supporting Coastal Resiliency and Sustainability following Hurricane Sandy

Summary: This project is for the comprehensive modernization of the official maps of the John H. Chafee Coastal Barrier Resources System (CBRS) along the North Atlantic coast.

General: Coastal barriers in North Atlantic States that are part of Coastal Barrier System.

Focus:

Project Components: FWS will follow established CBRS mapping protocols and procedures for this project which include the following general steps and milestones: transfer the CBRS boundaries from the official maps to new base digital maps (recent aerial imagery); assess the intent of the existing CBRS boundaries and fit the boundaries to the natural and development features they are intended to follow on the ground; conduct research (as necessary) to determine whether certain areas were inappropriately included within the CBRS in the past and whether certain undeveloped areas qualify for addition to the CBRS; make boundary adjustments to remove lands that were erroneously included in the past and add lands that are relatively undeveloped and qualify for addition; prepare a set of draft digital maps that depict FWS's proposed changes to the CBRS; make the draft digital maps available for public review and comment; prepare a set of final recommended digital maps that incorporate appropriate changes based on public input; provide Congress with a set of final recommended maps for its consideration; prepare a set of final official maps after Congress has enacted legislation to adopt the revised maps; and coordinate with FEMA to place the revised CBRS boundaries on the Flood Insurance Rate Maps (FIRMs).

Products/Outcomes: comprehensive modernization of the official maps of the John H. Chafee Coastal Barrier Resources System (CBRS) along the North Atlantic coast.

Dissemination Strategy: FWS to provide draft to public and final to Congress and then to FEMA. Digital and paper maps.

Project Linkages: USGS beach assessments

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-3 - Coastal Barrier Resources System Comprehensive Map Modernization

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input type="checkbox"/> Chesapeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input checked="" type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input checked="" type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

<input type="checkbox"/> Bathymetric Survey - Bathymetric Data
<input type="checkbox"/> Built Environment
<input type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input type="checkbox"/> Decision Support Tools
<input type="checkbox"/> Green Infrastructure
<input type="checkbox"/> Immediate Impact Assessment
<input type="checkbox"/> Increase Monitoring Capability for Future Storms
<input type="checkbox"/> Information Management Data Portals
<input type="checkbox"/> Long-term Impact Assessment
<input type="checkbox"/> Modeling Future Impacts
<input type="checkbox"/> Monitoring Restoration and Management
<input type="checkbox"/> Resilience Research
<input type="checkbox"/> Social Science
<input checked="" type="checkbox"/> Translation/Delivery of Information to Partners
<input checked="" type="checkbox"/> Status
<input type="checkbox"/> Trends

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input checked="" type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> Infrastructure	<input checked="" type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-4 - Predictive model for submerged aquatic vegetation and salt marsh resiliency

Project ID: FWS-4 Agency ID: 17 Lead Agency: FWS Project Duration (Yrs): 3

Contact: Chris Dwyer, Chris_dwyer@fws.gov, 413-253-8706

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: Building a predictive model for submerged aquatic vegetation prevalence and salt marsh resiliency in the face of Hurricane Sandy and sea level rise

Summary: To fully understand how climate change and severe storms affect saltmarsh ecosystems, the unique submerged aquatic vegetation (SAV) complex and the species that exclusively use them (e.g. Atlantic brant), it is important to build predictive models for SAV prevalence pre and post-Sandy as well as in future sea-level rise scenarios for improved management of saltmarsh management and resiliency. To accomplish this broad goal, this project will address 5 objectives that will provide DOI agencies with information on salt marsh and SAV beds that were most negatively impacted by Hurricane Sandy to improve future management plans for increasing the resiliency of coastal habitats.

General: Greater mid-Atlantic coastal zone from Rhode Island to Virginia

Focus: Submerged aquatic vegetation beds RI-VA

Project Components: Estimate available submerged aquatic vegetation (SAV) in the Mid-Atlantic using Thematic Mapping and build a predictive model for identifying future prevalence; Apply energy density values to SAV availability estimates to estimate landscape level energy available to the specialist SAV consumer, the Atlantic brant; Relate current brant population size and energetic requirements to determine if positive or negative imbalances exist; Forecast future brant carrying capacities by potential changes in the abundance and distribution of SAV that result from SLR as well from satellite imagery pre and post Hurricane Sandy; Provide Federal lands with information on what salt marsh and SAV beds were most negatively impacted to improved future management plans for increasing the resiliency of coastal habitats.

Products/Outcomes: This research will provide a quantitative assessment of Hurricane Sandy's impact on submerged aquatic vegetation within the green infrastructure of saltmarsh ecosystems; and as a result, Atlantic brant populations. Specifically, by evaluating the effect of 1) Hurricane Sandy on SAV and brant food supplies 2) future impacts of sea-level rise on SAV resources, we will be able to provide written recommendations to regional DOI agencies for the most effective management actions to maintain, restore, and enhance the resilience of tidal marsh habitats and the ecosystem services they provide. We foresee this information being critical for directing short-term restoration efforts along with long-term planning.

Dissemination Strategy: Published thesis paper

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-4 - Predictive model for submerged aquatic vegetation and salt marsh resiliency

Project Linkages: USGS estuarine assessments

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input checked="" type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input checked="" type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

<input checked="" type="checkbox"/> Bathymetic Survey - Bathymetric Data
<input type="checkbox"/> Built Environment
<input type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input type="checkbox"/> Decision Support Tools
<input type="checkbox"/> Green Infrastructure
<input type="checkbox"/> Immediate Impact Assessment
<input type="checkbox"/> Increase Monitoring Capability for Future Storms
<input type="checkbox"/> Information Management Data Portals
<input checked="" type="checkbox"/> Long-term Impact Assessment
<input checked="" type="checkbox"/> Modeling Future Impacts
<input checked="" type="checkbox"/> Monitoring Restoration and Management
<input type="checkbox"/> Resilience Research
<input type="checkbox"/> Social Science
<input type="checkbox"/> Translation/Delivery of Information to Partners
<input checked="" type="checkbox"/> Status
<input type="checkbox"/> Trends

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input checked="" type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input checked="" type="checkbox"/> State FWS
<input type="checkbox"/> USGS	
<input type="checkbox"/> Other Federal	Local
	NGO
	University

Project Data:

Data Needed	Data Produced
<input checked="" type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input checked="" type="checkbox"/> Demographics	<input checked="" type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input checked="" type="checkbox"/> Sea Level Rise	<input checked="" type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmnt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input checked="" type="checkbox"/> Ecosystem Response Data	<input checked="" type="checkbox"/> Water Quality
<input checked="" type="checkbox"/> Wildlife	<input checked="" type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input checked="" type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-5 - Three National Wildlife Refuge projects to increase coastal resilience and preparedness

Project ID: FWS-5 Agency ID: 30 Lead Agency: FWS Project Duration (Yrs): 3

Contact: Susan C. Adamowicz, susan_adamowicz@fws.gov, 207-251-3231

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: Three USFWS Region 5 multi-National Wildlife Refuge projects to increase coastal resilience and preparedness

Summary: This proposal will identify trends and vulnerabilities in over 70 miles of shoreline at 12 National Wildlife Refuges (NWR), integrity and resiliency status of over 30,000 acres of tidal salt marsh at 10 NWRs, and migratory waterbird population status in at least 10 National Wildlife Refuges. These projects directly benefit over 40 coastal communities in 8 states by supporting high quality storm surge and erosion protection, infrastructure protection, commercial and recreational fisheries production, hunting, bird-watching, boating, and local tourism.

General: 13 NWRs

Focus: Shoreline and marshes on 13 NWRs

Project Components: Shoreline Survey – track changes in and vulnerabilities caused by shoreline position and beach/dune migration; Salt Marsh Integrity (SMI) assessment – evaluate the wildlife and resiliency status of our salt marsh holdings and identify parcels in need of restoration; Integrated Waterbird Management and Monitoring (IWMM) – use a standard survey protocol to link waterbird populations to habitat management decisions at local, regional, and Flyway scales to ensure most efficient and effective management.

Products/Outcomes: 1) three years of shoreline and beach/dune monitoring have been combined with existing data to provide a 5-year report that highlights shoreline trends and vulnerabilities 2) when salt marsh integrity assessments have been completed for all 15 coastal salt marsh refuges and a list of high value and low resiliency parcels has been identified and 3) when IWMM surveys have been completed for a total of 10 coastal refuges with recommendations for increasing resiliency of high value waterbird locations.

Dissemination Strategy: Distribution to and through NWRs

Project Linkages: FWS Decision Support for Beaches and Decision Support for Tidal Marshes USGS shoreline assessments, elevation data, FWS tidal marsh bird (SHARP), USGS bird projects

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-5 - Three National Wildlife Refuge projects to increase coastal resilience and preparedness

Project Locations:		Science Category:
States	Waterbodies and Areas	
<input checked="" type="checkbox"/> CT	<input checked="" type="checkbox"/> Chesapaeake Bay	<input type="checkbox"/> Bathymetic Survey - Bathymetric Data
<input type="checkbox"/> DC	<input checked="" type="checkbox"/> Delaware Bay	<input type="checkbox"/> Built Environment
<input checked="" type="checkbox"/> DE	<input type="checkbox"/> Fire Island	<input type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input checked="" type="checkbox"/> MA	<input checked="" type="checkbox"/> Gulf of Maine	<input checked="" type="checkbox"/> Decision Support Tools
<input type="checkbox"/> MD	<input type="checkbox"/> Hudson River	<input type="checkbox"/> Green Infrastructure
<input checked="" type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay	<input type="checkbox"/> Immediate Impact Assessment
<input type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays	<input type="checkbox"/> Increase Monitoring Capability for Future Storms
<input type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound	<input type="checkbox"/> Information Management Data Portals
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays	<input checked="" type="checkbox"/> Long-term Impact Assessment
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight	<input type="checkbox"/> Modeling Future Impacts
<input type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays	<input checked="" type="checkbox"/> Monitoring Restoration and Management
<input checked="" type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor	<input checked="" type="checkbox"/> Resilience Research
<input checked="" type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England	<input type="checkbox"/> Social Science
	<input type="checkbox"/> Other	<input type="checkbox"/> Translation/Delivery of Information to Partners
		<input checked="" type="checkbox"/> Status
		<input checked="" type="checkbox"/> Trends

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> FWS	<input checked="" type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input checked="" type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmnt System
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input checked="" type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input checked="" type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input checked="" type="checkbox"/> Water Quality
		<input checked="" type="checkbox"/> Wildlife	<input checked="" type="checkbox"/> Wildlife
			<input checked="" type="checkbox"/> Fish
			<input checked="" type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-6 - Resilience of the Tidal Marsh Bird Community and Assessment of Restoration Efforts

Project ID: FWS-6 Agency ID: 32 Lead Agency: FWS Project Duration (Yrs): 3

Contact: Chris Dwyer, Chris_dwyer@fws.gov, 413-253-8706

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: Resilience of the Tidal Marsh Bird Community to Hurricane Sandy and Assessment of Restoration Efforts

Summary: We will: 1) assess the damage caused by Hurricane Sandy to the plant and bird communities of the tidal marsh for Species of Greatest Conservation Need (SGCN), 2) assess the success of tidal marsh restoration efforts conducted under Hurricane Sandy mitigation funding, 3) describe tidal marsh resilience to storm events, 4) improve the level of Scientific Uncertainty for Hurricane Sandy's Chain of Consequences as currently judged by the DOI Strategic Sciences Group – Operational Group Sandy (SSG-OGS), and 5) validate the Intervention Values previously assigned to possible post-storm actions by the SSG-OGS.

General: Coastal salt marsh habitats impacted by Hurricane Sandy

Focus: Coastal salt marsh habitats impacted by Hurricane Sandy AS part of SHARP project

Project Components: Utilize Saltmarsh Habitat & Avian Research Program (SHARP) to: assess habitat damage and wildlife impacts; assess biological effectiveness of recovery actions; assess demographic impacts on the most threatened species.

Products/Outcomes: This research will provide a direct, quantitatively rigorous assessment of Hurricane Sandy's impact on tidal marshes, a prioritized list of sites in need of restoration and mitigation, and ranking for the biological and economic efficacy of planned restoration projects. Further, we will provide a cost-benefit / portfolio analysis to determine, at both local and regional scales, the most effective and efficient course of action to maintain, restore, and enhance the resilience of marsh habitats and their ecosystem services.

Dissemination Strategy: Results of this project will be disseminated through the North Atlantic LCC to federal, state, and local partners through performance reports and via www.tidalmarshbirds.org.

Project Linkages: FWS Decision Support for Tidal Marshes, FWS Three NWR project, USGS shoreline assessments, elevation data, marsh projects

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-6 - Resilience of the Tidal Marsh Bird Community and Assessment of Restoration Efforts

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input checked="" type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input checked="" type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input checked="" type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input checked="" type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays
<input checked="" type="checkbox"/> NH	<input checked="" type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

<input type="checkbox"/> Bathymetic Survey - Bathymetric Data
<input type="checkbox"/> Built Environment
<input type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input checked="" type="checkbox"/> Decision Support Tools
<input type="checkbox"/> Green Infrastructure
<input checked="" type="checkbox"/> Immediate Impact Assessment
<input checked="" type="checkbox"/> Increase Monitoring Capability for Future Storms
<input type="checkbox"/> Information Management Data Portals
<input checked="" type="checkbox"/> Long-term Impact Assessment
<input checked="" type="checkbox"/> Modeling Future Impacts
<input checked="" type="checkbox"/> Monitoring Restoration and Management
<input type="checkbox"/> Resilience Research
<input type="checkbox"/> Social Science
<input type="checkbox"/> Translation/Delivery of Information to Partners
<input checked="" type="checkbox"/> Status
<input checked="" type="checkbox"/> Trends

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input checked="" type="checkbox"/> FWS	<input checked="" type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input checked="" type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input checked="" type="checkbox"/> NPS	<input checked="" type="checkbox"/> State FWS
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local
<input checked="" type="checkbox"/> Other Federal	<input checked="" type="checkbox"/> NGO
	<input checked="" type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input checked="" type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input checked="" type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input checked="" type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmnt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input checked="" type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input checked="" type="checkbox"/> Wildlife	<input checked="" type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input checked="" type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-7 - Increasing Resiliency of Road Stream Crossings While Restoring Aquatic Connectivity

Project ID: FWS-7 Agency ID: Lead Agency: FWS Project Duration (Yrs): 3

Contact: Andrew Milliken, andrew_milliken@fws.gov, 413-253-8269

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: Collaboratively Increasing Resiliency and Improving Standards for Culverts and Road Stream Crossings to Future Floods While Restoring Aquatic Connectivity

Summary: This project will develop a partner-driven, science-based approach for identifying and prioritizing culvert road stream crossings in the Hurricane Sandy area for increasing resilience to future floods while improving aquatic connectivity for fish passage. The resulting information and tools will be used to inform and improve decision making by towns, states and other key decision makers.

General: Streams in states in Hurricane Sandy Area

Focus: States where there are Hurricane Sandy aquatic connectivity projects

Project Components: (1) Identification, survey, mapping and prioritization of road crossing/culvert repair and replacement projects to maximize stream connectivity and post-flood resiliency in States impacted by Hurricane Sandy;
(2) Improved road crossing/culvert replacement standards to withstand future flood events including predicted future storm discharges due to climate change;
(3) Improved fish passage in streams in the Hurricane Sandy affected area; and
(4) Improved understanding, knowledge, and support for culvert/road crossing replacement implementation that is designed to withstand floods and improve fish passage.

Products/Outcomes: (1) Culvert/road crossing database in Sandy impacted states used by a collaborative partnership that includes the conservation, transportation and municipal communities;
(2) Functional model identifying priority dam and road crossing survey and implementation priorities under current and predicted future conditions
(3) Identification of best practices and standards for culvert/road crossing replacement;
(4) Training module fully developed and available for continued implementation and used by federal state, and local partners and partnerships.

Dissemination Strategy: Through a web-map based connectivity tool and the North Atlantic LCC DataBasin site as well as training trainers in each state.

Project Linkages: This project links to funded Hurricane Sandy FWS aquatic connectivity projects and several state databases on aquatic connectivity as well as a regional dam database.

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

FWS-7 - Increasing Resiliency of Road Stream Crossings While Restoring Aquatic Connectivity

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input type="checkbox"/> NY	<input checked="" type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England
	<input checked="" type="checkbox"/> Other

Science Category:

<input type="checkbox"/> Bathymetic Survey - Bathymetric Data
<input type="checkbox"/> Built Environment
<input type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input checked="" type="checkbox"/> Decision Support Tools
<input type="checkbox"/> Green Infrastructure
<input type="checkbox"/> Immediate Impact Assessment
<input type="checkbox"/> Increase Monitoring Capability for Future Storms
<input type="checkbox"/> Information Management Data Portals
<input type="checkbox"/> Long-term Impact Assessment
<input checked="" type="checkbox"/> Modeling Future Impacts
<input type="checkbox"/> Monitoring Restoration and Management
<input checked="" type="checkbox"/> Resilience Research
<input type="checkbox"/> Social Science
<input checked="" type="checkbox"/> Translation/Delivery of Information to Partners
<input type="checkbox"/> Status
<input type="checkbox"/> Trends

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input checked="" type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input checked="" type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input checked="" type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input checked="" type="checkbox"/> Local
<input checked="" type="checkbox"/> Other Federal	<input checked="" type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input checked="" type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmnt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input checked="" type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5A - Climate change forecasting and coastal planning

Project ID: GS1-5A Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS1-5A: Coastal vulnerability and wetlands impact assessment: climate change forecasting and coastal planning

Summary: Wetland marshes are important for securing barrier islands and shorelines and for providing wildlife habitat, water quality maintenance, and fishery production. Storm effects from Sandy degraded vegetation, thereby decreasing the coastal protection these habitats provide. USGS expertise with wetland ecology and imaging will be employed to document changes to Northeast Atlantic coastal wetland loss-degradation and surface elevations using data from the Surface Elevation Table (SET) network currently maintained by USGS and partners. Partners include Lynch, Roman, and Stevens/NPS, Adamowicz/FWS, Bundy/NOAA, and Maher/The Nature Conservancy. Imagery, the data from SETs, and marsh sediment cores will be collected and analyzed along the northeast coast to conduct regional to continental scale assessments of coastal marsh condition. Data modeling methods will be used to link trends in coastal lands and vegetation to the distinct processes that contribute to system resilience or loss of function. Additionally, the Submergence Vulnerability Index will be used to assess wetland vulnerability to future sea-level rise and storm events. Field assessments and mapping studies will be used to detect the onset and progression of latent changes to wetland vegetation, such as sudden marsh dieback, and to support short-term remediation efforts. This project will also produce mapping to document multi-decadal changes to the Northeast Atlantic coastline.

General: We propose to conduct regional to continental scale assessments of coastal marsh condition, including marsh ecosystem services such as the capacity to buffer storm surge, and vulnerability to future sea-level rise and storm surge.

Focus: Goal 1: Document change to Northeast U. S. coastal marsh surface elevations (Task 5A): Goal 2 Develop a strategic SET – MH monitoring network for the northeast U. S. (Task 5D):

Project Components: Coastal wetlands provide critical ecosystem services to humans as they protect both manmade and natural habitats from storm impacts. These habitats support social systems, economic and food security, and environmental stability. The sustainability of coastal wetlands is dependent on the ability of the wetland to maintain elevation during periods of storms, sea-level rise, and elevated water levels. In order to predict the fate of coastal wetlands, and ultimately protect or restore ecosystem services and values, it is essential that we understand where and how processes controlling elevation change are affected by storms such as Sandy. Data will be gathered on multiple spatial and temporal scales to create a regional understanding of where impacts occurred from Sandy and historic

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5A - Climate change forecasting and coastal planning

storms. Mapping vegetation resources and storm impact layers provides important baseline information for continued evaluation, especially future storm impacts. Understanding where and why changes have occurred is critical information for managers seeking to efficiently and effectively protect and restore important coastal wetland habitats.

Products/Outcomes: Products include evaluations of current coastal marsh impacts and condition, and projections of how a storm like Sandy can affect marsh vulnerability to future sea-level rise and storm surge.

Dissemination Strategy: Data access through project coordinator; fact sheets and scientific reports (USGS reports, journals, symposia)

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input checked="" type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

<input type="checkbox"/>	Bathymetric Survey - Bathymetric Data
<input checked="" type="checkbox"/>	Built Environment
<input type="checkbox"/>	Collect/Process Elevation Data Including LiDAR
<input type="checkbox"/>	Decision Support Tools
<input type="checkbox"/>	Green Infrastructure
<input checked="" type="checkbox"/>	Immediate Impact Assessment
<input type="checkbox"/>	Increase Monitoring Capability for Future Storms
<input type="checkbox"/>	Information Management Data Portals
<input checked="" type="checkbox"/>	Long-term Impact Assessment
<input checked="" type="checkbox"/>	Modeling Future Impacts
<input checked="" type="checkbox"/>	Monitoring Restoration and Management
<input type="checkbox"/>	Resilience Research
<input type="checkbox"/>	Social Science
<input type="checkbox"/>	Translation/Delivery of Information to Partners
<input type="checkbox"/>	Status
<input type="checkbox"/>	Trends

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5A - Climate change forecasting and coastal planning

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input checked="" type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input checked="" type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
States, Tribes, TNC	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5B - Migrating landbirds and their habitats.

Project ID: GS1-5B Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS1-5B: Assess possible impacts of Superstorm Sandy on migrating landbirds and their habitats.

Summary: Birds are a trust responsibility for DOI agencies as well as important environmental indicators. For these reasons USGS emphasizes the study of birds by maintaining expert ornithologists, decades of stored data, and the latest technologies. This project seeks to document the impacts of Hurricane Sandy on coastal birds using historic and current data from USGS, USFWS, and others. Collaborators include Fish and Wildlife Service (Johnston, Dwyer, various refuges managers and biologists), State Agencies, Joint Ventures (Bowman and Spiegel), Manomet Bird Observatory, the National Park Service, and BOEM (Woehr and Bigger). This project will establish pre-storm and current population numbers; establish study sites on DOI trust lands and other public lands to study declining populations of secretive marsh and shore birds; gather radar (NEXRAD) and field data (i.e. satellite telemetry data) on migratory bird flight patterns pre- and post-storm and assess potential for changes to their migratory stop-over habitats, resident habitats, food sources, reproductive capacities, and phenology; calculate mean bird density for multiple migration seasons to establish a baseline of bird distributions prior to the storm; gather data necessary for mapping changes to wildlife habitat; and document wetland conditions and food supply for bird migration and breeding.

General: Each year during August through November, millions of landbirds (i.e., birds that nest in terrestrial habitats) migrate from breeding areas in the U.S. and Canada to more southerly wintering areas.

Focus: The main goals of this study are to assess the immediate response of migrating landbirds to the approaching storm.

Project Components: The Department of the Interior, led by the U.S. Fish and Wildlife Service, has trust responsibility for many of the birds of the United States under the authority of the Migratory Bird Treaty Act, among other legislation. Further, many of these birds are found on USFWS Refuges and so are trust resources under the auspices of the Refuge system. As the Nation's science agency it is incumbent on USGS to support science needs for USFWS. USGS can provide important support by working across state and international boundaries to collect animal and habitat data. USGS contributes long-term trend analysis of bird populations from its archives of bird population and distribution data.

Products/Outcomes: GIS coverages showing migrant densities at Mid-Atlantic stopover sites before and after Sandy

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5B - Migrating landbirds and their habitats.

Dissemination Strategy: Data access through project coordinator; fact sheets and scientific reports (USGS reports, journals, symposia)

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input checked="" type="checkbox"/> CT	<input type="checkbox"/> Chesapeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input checked="" type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input checked="" type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input checked="" type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

<input type="checkbox"/>	Bathymetric Survey - Bathymetric Data
<input type="checkbox"/>	Built Environment
<input type="checkbox"/>	Collect/Process Elevation Data Including LiDAR
<input checked="" type="checkbox"/>	Decision Support Tools
<input type="checkbox"/>	Green Infrastructure
<input type="checkbox"/>	Immediate Impact Assessment
<input checked="" type="checkbox"/>	Increase Monitoring Capability for Future Storms
<input type="checkbox"/>	Information Management Data Portals
<input checked="" type="checkbox"/>	Long-term Impact Assessment
<input checked="" type="checkbox"/>	Modeling Future Impacts
<input checked="" type="checkbox"/>	Monitoring Restoration and Management
<input type="checkbox"/>	Resilience Research
<input type="checkbox"/>	Social Science
<input type="checkbox"/>	Translation/Delivery of Information to Partners
<input checked="" type="checkbox"/>	Status
<input checked="" type="checkbox"/>	Trends

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input checked="" type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
Smithsonian, States, Tribes, TNC	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5C - Long term Impact to coastal wetlands and lagoons

Project ID: GS1-5C Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS1-5C: Long-term consequences and management responses to coastal wetlands and lagoons impacted by Hurricane Sandy

Summary: Hurricane Sandy damaged vegetation in coastal forests, marshes and lagoons through increased salinity intrusion, persistent flooding, and mechanical breakage.

General: Hurricane Sandy damaged vegetation in coastal forests, marshes and lagoons through increased salinity intrusion, persistent flooding, and mechanical breakage.

Focus: The study goal is to document the damage and response of coastal ecosystems, including wetland and maritime forests and wetland marshes to Hurricane Sandy. In reaching that goal, we will produce maps and remote sensing technologies.

Project Components:

Products/Outcomes: Hurricane Sandy surge extent contours and duration-of-exposure.

Dissemination Strategy: Products will be transferred to interested managers, policy makers, researchers, and the public by way of Fact Sheets, Research Briefs, Project Reports, Maps, GIS databases, journal publications, and presentations.

Project Linkages:

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5C - Long term Impact to coastal wetlands and lagoons

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

TNC

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5D - Long-term Impact Spatial Patterns of Wetland Morphology

Project ID: GS1-5D Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS1-5D: Predicting the Long-term Impact of Hurricane Sandy on Spatial Patterns of Wetland Morphology in Salt Marshes of Jamaica Bay, New York

Summary: Hurricane Sandy thus provides a critical opportunity for studying the impacts of hurricanes on short-term sedimentation and erosion and long-term morphologic changes in coastal wetlands.

General: The National Park Service - Gateway National Recreation Area (NPS-GNRA), located within the Jamaica Bay (JB), was the nation's first urban national park.

Focus: Develop an integrated high resolution numerical modeling system that couples wind, wave, storm surge, sediment transport, hydrodynamics and wetland morphologic dynamics.

Project Components:

Products/Outcomes: One USGS Open-File-Report on modeling of Hurricane Sandy impacts on salt marsh morphology in Jamaica Bay.

Dissemination Strategy:

Project Linkages:

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5D - Long-term Impact Spatial Patterns of Wetland Morphology

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5E - Analysis of Marine and Estuarine Wetlands

Project ID: GS1-5E Agency ID: Lead Agency: USGS Project Duration (Yrs): 1

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS1-5E: An Analysis of Marine and Estuarine Wetlands, Deepwater Habitats for selected Coastal Barrier islands and wetland sites located within high impact zones of Hurricane Sandy, October 2012.

Summary:

General: NWRC proposes to conduct detailed mapping of marine and estuarine wetlands and deepwater habitats, including beaches and tide flats, and upland land use/land cover, using specially-acquired aerial imagery flown at 1-foot resolution.

Focus: 1. Produce detailed map inventory of the barrier beaches, bays and coastal lagoons along the New York and New Jersey Atlantic coastline.

Project Components:

Products/Outcomes: 1. Esri geodatabase containing habitat data for study sites 2. Classified maps of each study site. 3. Habitat Maps and associated data for Edwin B Forsythe NWR. 4. Habitat Maps and associated data for Cape May NWR.

Dissemination Strategy:

Project Linkages:

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5E - Analysis of Marine and Estuarine Wetlands

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5F - SET cores

Project ID: GS1-5F **Agency ID:** **Lead Agency:** USGS **Project Duration (Yrs):** 2

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS1-5F: Contributions to PWRC project 'Coastal Vulnerability and Wetlands Impact Assessment.

Summary: Effects being investigated – Overall project (PWRC + NWRC) aims to assess Hurricane Sandy impacts on coastal marshes and associated ecosystem services, as well as their sustainability, vulnerability to future sea-level rise and storm surge, and capacity to buffer future storm surges. Importance – Broad goal of the combined project is to provide valuable information for modeling efforts designed to inform strategic policy decisions, including societal adaptation to climate change and coastal planning.

General: Process core samples taken by from the affected region by local management agencies and provide interpretation and analyses of storm sediment deposits associated with the monitoring stations in the network.

Focus: Apply a newly developed Submergence Vulnerability Index (SVI) to assess marsh vulnerability to submergence.

Project Components:

Products/Outcomes: "Initial assessment of Hurricane Sandy impacts on surface elevation change at long-term monitoring sites along the North Atlantic, US" USGS-Open-file Report.

Dissemination Strategy:

Project Linkages:

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5F - SET cores

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5G - Surge and Marsh Dieback in the New Jersey

Project ID: GS1-5G Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS1-5G: Hurricane Sandy Surge and Marsh Dieback in the New Jersey Coastal Zone

Summary:

General: The storm surge associated with Hurricane Sandy injected elevated salinity waters into the extensive coastal wetland marshes along the eastern seaboard and within wetlands bounding the numerous estuaries.

Focus: The goal of this proposed project is the near immediate to short-term response of coastal wetlands along the northern Delaware Bay and New Jersey coastline to storm surges associated with Hurricane Sandy.

Project Components: image coverages. 4.Polygon-vectors depicting the surge extents created from each radar image. 5.Polygon-vectors depicting the wetland dieback severities created from the TM and XS images. Surge extent and dieback severity polygon-vectors will be formatted for convenient use in Google maps and GIS analyses.

Products/Outcomes: 1.Map projected Landsat TM, SPOT XS, TerraSAR-X and COSMO X-band images in tiff formats. 2.A flood extent map associated with each radar image collection date and coverage. 3.A sudden wetland dieback map constructed from the combined TM and XS

Dissemination Strategy:

Project Linkages:

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5G - Surge and Marsh Dieback in the New Jersey

Project Locations:

States

- CT
- DC
- DE
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Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
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- Long Island Bays
- Long Island Sound
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- NY-NJ Harbor
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- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
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Project Partners:

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Other

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- MARCO
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- State CZM
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- Local
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Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
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- Hydrology
- Information Mgmnt System
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- Water Quality
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- Fish
- Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5H - Assessment of wetland

Project ID: GS1-5H **Agency ID:** **Lead Agency:** USGS **Project Duration (Yrs):** 2

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS1-5H: Assessment of wetland area change and shoreline erosion due to Hurricane Sandy

Summary: The analysis proposed here will use multiple dates of satellite data to track landscape changes within the coastal zone affected by Hurricane Sandy.

General: Documenting and understanding the occurrence of wetland loss and shoreline erosion from Hurricane Sandy will provide for effective planning, mitigation, and restoration activities.

Focus: The goal of this analysis is to quantify land area change over time to document and understand the short- and long-term effects of Hurricane Sandy on wetlands throughout the Atlantic coast of the United States.

Project Components:

- Products/Outcomes:**
- Geospatial datasets characterizing land/water throughout the study area.
 - FGDC compliant metadata for each dataset
 - A final project report/map. This final report will be submitted for publication in a USGS scientific publication (OFR and/or SIR/SIM publication series)

Dissemination Strategy:

Project Linkages:

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5H - Assessment of wetland

Project Locations:

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Waterbodies and Areas

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Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
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Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
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- Hydrology
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- Water Quality
- Wildlife
- Fish
- Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5I - Seabird Migration

Project ID: GS1-5I Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS1-5I: Assessing Extreme Meteorological Events on Seabird Migration

Summary:

General: Whenever a hurricane or tropical storm comes inland, birders in the region will race to lakes and rivers to see if any oceanic birds have been deposited there.

Focus: Our goal is to test the influence of meteorological parameters (temperature, humidity, pressure, wind speed and direction) caused by hurricane Sandy on different migration characteristics.

Project Components:

Products/Outcomes: Sandy-impacted national wildlife refuges and national seashores along the Atlantic coast and Great Lakes, such as Chincoteague and other locations from North Carolina to Massachusetts, may see an influx or departure of migrating seabirds depending on location and characteristics of a major meteorological event like Sandy.

Dissemination Strategy:

Project Linkages:

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5I - Seabird Migration

Project Locations:

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Waterbodies and Areas

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- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
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Project Partners:

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Other

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Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
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Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5J - Threatened Shorebird

Project ID: GS1-5J **Agency ID:** **Lead Agency:** USGS **Project Duration (Yrs):** 1

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS1-5J: Response of a Threatened Shorebird to Hurricane Sandy: Factors Affecting Reproductive Success of Piping Plovers on Edwin B. Forsythe National Wildlife Refuge

Summary: The Atlantic Coast Piping Plover is a federally-listed, threatened shorebird that inhabits beaches of barrier islands, ocean fronts, bays and inlets, tidal creeks/marshes, peninsulas, and sand bars

General: Understanding the reproductive response of Piping Plovers to changes in beach habitats will better inform decision-making as plans are made for beach restoration in areas affected by Hurricane Sandy.

Focus: The primary goal of this study is to document the change to beach habitats and the response of breeding Piping Plovers to Hurricane Sandy on Edwin B. Forsythe NWR.

Project Components:

Products/Outcomes: A model of the ecological factors affecting reproductive success of Piping Plovers using Edwin B. Forsythe NWR, 1987 – 2012. A map of changes in Piping Plover nesting habitat caused by Hurricane Sandy. The map will be based on photo interpretation of 2008 and 2013 stereo aerial photography

Dissemination Strategy:

Project Linkages:

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5J - Threatened Shorebird

Project Locations:

States

- CT
- DC
- DE
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Waterbodies and Areas

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- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
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- Social Science
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Project Partners:

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Other

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- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
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- Hydrology
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- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5K - Coastal Bird and Other Wildlife Populations

Project ID: GS1-5K Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS1-5K: Assessment of Storm Impacts on Coastal Bird and Other Wildlife Populations, Behavior, and Food Sources in the Outer Banks, North Carolina.

Summary: This project will assess shore- and marsh bird populations, behavior, and food sources in Hurricane Sandy-impacted North Carolina barrier islands.

General: In the face of sea-level rise and as climate change conditions increase the frequency and intensity of tropical storms along the north-Atlantic Coast.

Focus: We will study seasonal foraging behavior and benthic macroinvertebrate community structure as a prey resource for focal species including the threatened piping plover, American oystercatcher, red knot, and Wilson's plover.

Project Components:

- Products/Outcomes:
- Peer-reviewed journal articles
 - USGS factsheets
 - Occupancy models and wildlife habitat characterization decision-support tools
 - Media stories (outlets include NWRC, NCWRC, and NC Audubon websites and publications)
 - Teaching capsules and brochures for local educators and nature centers

Dissemination Strategy:

Project Linkages:

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5K - Coastal Bird and Other Wildlife Populations

Project Locations:

States

- CT
- DC
- DE
- MA
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- NJ
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Waterbodies and Areas

- Chesapaeake Bay
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- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
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- Resilience Research
- Social Science
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Project Partners:

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- HUD
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- USGS
- Other Federal

Other

- AFC
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- MARCO
- NROC
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- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
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- Elevation Data
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- Geology
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- Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5L - Coastal Forest Resources of Atlantic Coast DOI Parks and Refuges

Project ID: GS1-5L Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS1-5L: Modeling Hurricane Sandy Impacts and Storm Surge Protection of Coastal Forest Resources of Atlantic Coast DOI Parks and Refuges

Summary:

General: Coastal forests of the Atlantic coast from Florida to Maine were impacted by Superstorm Sandy (2012) by varying degrees of wind and surge force.

Focus: The primary goal of this study is to assess coast-wide storm impacts to DOI coastal forest resources in order to assist short-term salvage and remediation decisions and to aid long-term restoration prioritization and ecosystem modeling applications.

Project Components:

Products/Outcomes: Products will include an assessment of current forest damage and condition, reconstructions of coastal storm wind and surge at the collective sampling sites coast-wide, isotopic chronologies of wetland accretion rates and forest response to drought and hurricane history, and related modeling applications for forecasting coastal protection and restoration priorities of recurring hurricanes and rising sea levels under climate change. Products will incorporate scientific findings that will be represented and transferred to DOI leads and managers, policy makers, researchers, and the public by way of Fact Sheets, Research Briefs, Project Reports, journal publications, and presentations.

Dissemination Strategy:

Project Linkages:

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5L - Coastal Forest Resources of Atlantic Coast DOI Parks and Refuges

Project Locations:

States

- CT
- DC
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Waterbodies and Areas

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- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
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Project Partners:

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Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
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- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

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Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5M - Joint Ecosystem Modeling (JEM)

Project ID: GS1-5M Agency ID: Lead Agency: USGS Project Duration (Yrs): 2

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS1-5M: The Joint Ecosystem Modeling (JEM) community of the Florida Everglades has a proven track record of collaborating with scientists and resource managers from Federal and State agencies, universities, and other nongovernment organizations to identify needs and develop tools in support of decision making for a sustainable ecosystem.

Summary: Identify and gather relevant ecological data; compile an inventory of existing ecological models, data standards, visualization and analysis tools, and decision support tools; and assess needs within the resource management community.

General: Identify and gather relevant ecological data; compile an inventory of existing ecological models, data standards, visualization and analysis tools, and decision support tools; and assess needs within the resource management community.

Focus: Cultivate a network of science partners in the region through regular meetings and partner communication.

Project Components:

Products/Outcomes: Compilation of existing models and modeling tools of interest to our DOI partners, focusing on ecological models and decision support tools that could be used for recovery and resilience planning in the project focal area. Details compiled for each model and tool will include:

- required input data,
- description of generated output data,
- specifications of program logic, and
- restrictions and limitations.

2. Describe data transformation needs for each available model.
3. Evaluate the current state of modeling data standards and conventions.
4. Develop timeline for integration of modeling output into EverVIEW data viewer.
5. Determine ecological modeling, visualization, and decision support needs.

Dissemination Strategy:

Project Linkages:

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS1-5M - Joint Ecosystem Modeling (JEM)

Project Locations:

States

- CT
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Waterbodies and Areas

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Science Category:

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Project Data:

Data Needed

- Bathymetric Data
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- Demographics
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- Wildlife

Data Produced

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Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS2-5A - Assess wetland ecosystem function and process response to impacts

Project ID: GS2-5A Agency ID: 92 Lead Agency: USGS Project Duration (Yrs): 2

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS2-5A: Evaluating Ecosystem Resilience: Assessing wetland ecosystem functions and processes in response to Hurricane Sandy impacts

Summary: This project will produce wetland impact assessments to understand, as early as possible, how northeastern Atlantic coastal wetland resources have been changing in terms of their extent and ecological structure and function, how they were changed by Hurricane Sandy, and how to use that information to inform remediation and conservation efforts.

General:

Focus:

Project Components: Storms are having a cumulative impact on coastal plant and animal species in the United States and around the world, especially as humans have altered the natural mechanisms of coastline regeneration. This information is critical to decisionmakers and the public to understand as early as possible how Northeast Atlantic coastal wetland resources have been changing, how they were changed by Sandy, and how to use that information to inform remediation and conservation efforts. The task will provide critically important information for this assessment, particularly the condition and trends of coastal wetland vegetation, including the stability of barrier islands and lagoons.

Products/Outcomes:

Dissemination Strategy: HQ organized website, data portal, workshops, training on GIS tools, talks, symposia, decision support documentation and tools

Project Linkages:

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS2-5A - Assess wetland ecosystem function and process response to impacts

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal
- NYC

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS2-5D - Forecasting Biological Vulnerabilities

Project ID: GS2-5D **Agency ID:** 8 **Lead Agency:** USGS **Project Duration (Yrs):** 2

Contact: Matthew Andersen, mandersen@usgs.gov, 703-648-4064

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: GS2-5D: Forecasting Biological Vulnerabilities: Building and delivering data visualization, multiscale datasets, and models of reduced biological systems resilience to future storms in support of informed natural- resource decisionmaking

Summary: This project will provide a Web-based application to deliver habitat model outputs, which will provide decisionmakers with useful, credible data when determining the best use of restoration and recovery resources. This project will provide access to existing models and support the development and provision of two new models and associated data for application.

General:

Focus:

Project Components: This project will provide ecological information in accessible, user-friendly formats to help restore and rebuild national parks, national wildlife refuges, and cross boundaries to the larger North Atlantic Landscape Conservation Cooperative region. Climate change, sea-level rise, and coastal subsidence caused by human activities are predicted to increase the frequency and duration of hurricanes/storms and their impacts on coastal ecosystems worldwide. The data and ecological modeling output will contribute to increasing the resilience and capacity of coastal habitats to withstanding future storm damage. The USGS will provide access to biological data and modeling outputs to help decision makers understand the status and trends of trust resources and the impact that large storms have on these resources. The modeling efforts will help in the recovery effort by providing information on the vulnerability of coastal wetlands and at-risk species to future storm events.

Products/Outcomes:

Dissemination Strategy: HQ organized website, data portal, workshops, training on GIS tools, talks, symposia, decision support documentation and tools

Project Linkages:

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

GS2-5D - Forecasting Biological Vulnerabilities

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

NPS-1 - Acquire high-resolution elevation data

Project ID: NPS-1 Agency ID: 3 Lead Agency: NPS Project Duration (Yrs): 3

Contact: Sara Stevens, Sara_Stevens@nps.gov, 401-874-4548

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: Acquire high-resolution elevation data to improve storm surge forecasting and mitigation planning

Summary: The goal of this project is to acquire baseline, ground-based, high resolution bathymetric and terrestrial topographic data and information required to aid in developing highly accurate and precise models (inundation, storm surge, coastal change, climate change, sea level rise, etc.) that can be incorporated into future resiliency planning efforts for coastal parks in the Northeast Region. This project will acquire high-resolution elevation data for key park areas identified by park managers and planners, and seamless topographic surfaces will be developed across the landwater interface for those critical areas.

General:

Focus: Assateague Island NS, Gateway NRA, Fire Island NS, Cape Cod NS

Project Components: Organization of project management team that include subject matter experts (including both NPS, USGS and NOAA scientists) to assist with project development, implementation of data collection, and development of final product requirements best suitable to guide park planning. Solicitation of CESU collaborators and technical peer review of project plans, development of cooperative agreements and contracts. Field data collection. Annual technical progress reports.
Technical team review of progress report and project plan progress and implementation of necessary changes following first year of field data collection. Development of final products.
Development of science communication resource information.

Products/Outcomes: Prediction modeling such as for sea level rise, storm surge and inundation in coastal areas rely on the analysis of detailed, accurate topography and bathymetry data (topobathy). In order for the NPS to improve response to ocean-based severe events in the future such as Hurricane Sandy, the NPS must acquire highly accurate, park-wide, coastal mapping information. Final products include data, metadata, map products and reports (reports will include assistance and guidance to parks on how products can and should be incorporated into park resiliency and resource management planning strategies.

Dissemination Strategy: Technical series publication of data and results. Development of science communication resource information (Resource Briefs) for each park targeting audiences such as managers and the public with the goal to educate about the data collected, the information gained by this project and its uses and benefits to

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

NPS-1 - Acquire high-resolution elevation data

parks and public.

Project Linkages: Expansion of project funded through Sandy Construction funding. Seamless bathy\topo with NPS Submerged Marine Habitat Mapping. Coordinate with USGS Topographic Surveys: Lidar Elevation Data

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island
<input checked="" type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input checked="" type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

<input type="checkbox"/> Bathymetic Survey - Bathymetric Data
<input type="checkbox"/> Built Environment
<input checked="" type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input type="checkbox"/> Decision Support Tools
<input type="checkbox"/> Green Infrastructure
<input type="checkbox"/> Immediate Impact Assessment
<input type="checkbox"/> Increase Monitoring Capability for Future Storms
<input checked="" type="checkbox"/> Information Management Data Portals
<input type="checkbox"/> Long-term Impact Assessment
<input type="checkbox"/> Modeling Future Impacts
<input type="checkbox"/> Monitoring Restoration and Management
<input type="checkbox"/> Resilience Research
<input type="checkbox"/> Social Science
<input type="checkbox"/> Translation/Delivery of Information to Partners
<input type="checkbox"/> Status
<input type="checkbox"/> Trends

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	State
<input checked="" type="checkbox"/> NOAA	State CZM
<input checked="" type="checkbox"/> NPS	State FWS
<input checked="" type="checkbox"/> USGS	
<input type="checkbox"/> Other Federal	<input type="checkbox"/> Local
	<input type="checkbox"/> NGO
	<input checked="" type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input checked="" type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input checked="" type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

NPS-3 - Evaluate ecological impacts of breaching on estuarine habitats

Project ID: NPS-3 Agency ID: 35 Lead Agency: NPS Project Duration (Yrs): 3

Contact: Charles Roman, charles_roman@nps.gov, 401-874-6886

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: Evaluate ecological impacts of breaching on estuarine habitats

Summary: Hurricane Sandy created a breach through Fire Island National Seashore. The breach provides an extraordinary opportunity to evaluate ecological responses to inform breach management decisions at Fire Island and to inform future breach management decisions within the the mid-Atlantic region and elsewhere. This project will collect and synthesize information on the components of the Bay-estuary that rapidly response to the new breach (water quality, plankton) and those components that are longer to respond (fish communities).

General: Great South Bay

Focus: Fire Island NS

Project Components: This project intends to continue the ongoing Great South Bay ecological monitoring efforts and include some new components, including: -- Assessing Response of the Great South Bay Plankton Community to Hurricane Sandy (Continuation of NPS project, Stony Brook University)-- Assessing the Response of Great South Bay Seagrass Habitats and Faunal Utilization of Seagrass (Continuation of NPS project, Stony Brook University)-- Evaluate the Response of Great South Bay Fish and Benthic Communities (Continuation of NY DEC projects, Stony Brook University)-- Intitial Development of Baywide Ecosystem Model to couple physical and ecological responses to the breach (New Project, USGS and multiple other cooperators to be determined).

Products/Outcomes: 1) collection, analysis, interpretation, and publication of findings from the ecological monitoring efforts, 2) development of an ecosystem-level model intended to synthesize physical and ecological information into a framework that will assist with future decision-making and prediction of estuarine responses to breaches, and 3) incorporation of ecological response information into breach management decision making.

Dissemination Strategy: Peer reviewed technical reports and publications; presentations to multiple agency and stakeholder audiences

Project Linkages: There are numerous ecological data gathering efforts ongoing within Great South Bay that are directly contributing to our knowledge of how the Bay ecosystem is responding to the new Wilderness breach.-- NY DEC, post-storm assessment of hard clam condition (\$75,000)-- NY DEC, post-storm assessment of fish and epibenthic species, compare to 2007 survey (\$260,000)-- NY DEC, post-storm repair of Bay monitoring bouy (\$30,000)-- NPS, post-storm submerged habitat

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

NPS-3 - Evaluate ecological impacts of breaching on estuarine habitats

mapping (\$300,000)-- NPS, post-storm plankton community assessment (\$395,000)-- NPS, post-storm seagrass faunal utilization (\$200,000)-- NPS, breach physical monitoring and bay water levels (\$80,000)-- Suffolk County, Bay water quality monitoring (ongoing); TNC marine reserve monitoring; others

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

<input type="checkbox"/> Bathymetric Survey - Bathymetric Data
<input type="checkbox"/> Built Environment
<input type="checkbox"/> Collect/Process Elevation Data Including LiDAR
<input checked="" type="checkbox"/> Decision Support Tools
<input type="checkbox"/> Green Infrastructure
<input type="checkbox"/> Immediate Impact Assessment
<input type="checkbox"/> Increase Monitoring Capability for Future Storms
<input checked="" type="checkbox"/> Information Management Data Portals
<input checked="" type="checkbox"/> Long-term Impact Assessment
<input checked="" type="checkbox"/> Modeling Future Impacts
<input checked="" type="checkbox"/> Monitoring Restoration and Management
<input checked="" type="checkbox"/> Resilience Research
<input type="checkbox"/> Social Science
<input type="checkbox"/> Translation/Delivery of Information to Partners
<input checked="" type="checkbox"/> Status
<input type="checkbox"/> Trends

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input checked="" type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input checked="" type="checkbox"/> NPS	<input checked="" type="checkbox"/> State FWS
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input checked="" type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input checked="" type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input checked="" type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input checked="" type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input checked="" type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input checked="" type="checkbox"/> Ecosystem Response Data	<input checked="" type="checkbox"/> Water Quality
<input checked="" type="checkbox"/> Wildlife	<input checked="" type="checkbox"/> Wildlife
	<input checked="" type="checkbox"/> Fish
	<input checked="" type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

NPS-4 - Provide Support for the Science and Resilience Center at Jamaica Bay

Project ID: NPS-4 Agency ID: 14 Lead Agency: NPS Project Duration (Yrs): 3

Contact: Charles Roman, charles_roman@nps.gov, 401-874-6886

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: Provide Support for the Science and Resilience Center at Jamaica Bay

Summary: Working with the Rockefeller Foundation, the City of New York and other public and private entities this project will support the participation of the NPS and other DOI agencies (e.g., USGS) in a recently established top-tier, internationally-recognized, university-based center -- the Science and Resilience Center of Jamaica Bay. The Center will develop innovative approaches and test emerging techniques that will enhance our understanding of resilience in the urban, coastal ecosystems with a focus on Jamaica Bay, a unit of Gateway National Recreation Area. Targeted science efforts will provide major benefits to society by developing information and tools to better manage coastal resources, better predict the impact of climate change on urban ecosystems, and enhance the ability to respond to major catastrophic events such as Hurricane Sandy, contaminant spills, etc. Carefully chosen and supported university partnerships can stretch scarce investment funding.

General: Coastal urban natural areas

Focus: Gateway NRA, New York City, Jamaica Bay

Project Components: Lead institution, in collaboration with NPS and NY City, will hire a Center Director and Center staff. Prepare a vision and mission statement for the Center. Convene multi-agency and university partner workshops to identify the Center's research mission. Convene Resilience Symposium, including internationally recognized experts, to formally announce the Center, its vision, and chart future directions. Prepare synthesis of resilience strategies ongoing in urban environments globally. Initiate research to test resilience strategies and devise new innovative strategies.

Products/Outcomes: The goal of this top-tier, internationally-recognized, university-coordinated center will develop and implement innovative approaches and test emerging techniques and processes which will enhance our understanding of resilience in the urban coastal ecosystems. Focusing on Jamaica Bay, a unit of Gateway National Recreation Area, and adjacent NYC parks and communities, the goal of the center is to assist federal, state, and local governments to understand and adapt to increases in the frequency and intensity of storms and sea level rise, and mitigate the effects of these events so we can respond quickly with science-informed approaches. The center will also identify new ways to incorporate resiliency into the built environment so they can withstand severe weather events, exporting their acquired knowledge to communities, students and citizen scientists.

Dissemination Strategy: Frequent, formal interactions with management agencies (e.g., NPS, NY City)

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

NPS-4 - Provide Support for the Science and Resilience Center at Jamaica Bay

Parks) to insure that the Center’s research and outreach focus the directed toward meeting the immediate and anticipated challenges of managers A steering committee comprised of DOI, USACE, NYC, NY State will assess results of scientific and educational enterprises as well as to gauge the influence of the center among the academic community.

Project Linkages: The Rockefeller Foundation has funded the initial effort to establish the Center (\$500,000) and pledges an additional \$1,500,000. In addition, the Secunda Family Foundation (\$500,000) and the Bloomberg Family Foundation (\$500,000) have also provided support. The lead institution will support a Center Director and administrative staff (estimated at \$200,000/yr) and intends to fund-raise for a dedicated Center building.

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input checked="" type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

NPS-4 - Provide Support for the Science and Resilience Center at Jamaica Bay

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input checked="" type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input checked="" type="checkbox"/> Biogeochemistry	<input checked="" type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input checked="" type="checkbox"/> Coastal water movement	<input checked="" type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input checked="" type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input checked="" type="checkbox"/> Infrastructure	<input checked="" type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input checked="" type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input checked="" type="checkbox"/> NPS	<input checked="" type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input checked="" type="checkbox"/> Information Mgmt System
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input checked="" type="checkbox"/> Vulnerability to storm surge	<input checked="" type="checkbox"/> Surge-Wave-Tide
	<input checked="" type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input checked="" type="checkbox"/> Water Quality
		<input checked="" type="checkbox"/> Wildlife	<input checked="" type="checkbox"/> Wildlife
			<input checked="" type="checkbox"/> Fish
			<input checked="" type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

NPS-5 - Submerged Marine Habitat Mapping

Project ID: NPS-5 Agency ID: 72 Lead Agency: NPS Project Duration (Yrs): 3

Contact: Charles Roman, charles_roman@nps.gov, 401-874-6886

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: Submerged Marine Habitat Mapping: A foundation for enhancing resilience to coastal storms and other climate change drivers

Summary: Submerged marine areas are the dominant habitat type of Northeast Region coastal parks, yet knowledge of these valued habitats is lacking. This project will map these habitats providing information necessary to guide resource conservation actions that will enhance resilience.

General: Subtidal marine for four impacted national parks

Focus: Assateague Island NS, Gateway NRA, Fire Island NS, Cape Cod NS

Project Components: Preparation and technical peer review of full project study plans. Obtain park and State collecting permits. Field data collection and laboratory analyses (e.g., benthic species taxonomy and sorting, sediment analyses). Development of data management portal. Annual technical progress reports. Technical and public workshops to utilize submerged data toward development of resilience strategies. Complete final technical report.

Products/Outcomes: 1) Collection of field data (acoustic data, ground-truth) and preparation of maps and inventory databases, 2) technical report describing project methods, presenting map products and inventory data, identifying critical, unique, threatened and other categories of marine resources, and offers discussion of specific ecosystem resilience strategies to consider, 3) development and routine use of the data management portal, 4) routine use of the information for design and implementation of resilience strategies.

Dissemination Strategy: Technical and public workshops to utilize submerged data toward development of resilience strategies. Complete final technical report.

Project Linkages: Expansion of project funded through Sandy Construction funding. Seamless bathy\topo with NPS Acquire high-resolution elevation data to improve storm surge forecasting and mitigation planning

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

NPS-5 - Submerged Marine Habitat Mapping

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

NPS-6 - Assess Groundwater Resources to Adapt to Climate Change

Project ID: NPS-6 Agency ID: Lead Agency: NPS Project Duration (Yrs): 3

Contact: Patricia Rafferty, patricia_rafferty@nps.gov, 631-687-4747

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: Assess Groundwater Resources to Adapt to Climate Change in Mid Atlantic National Seashores

Summary: Understanding the risks to groundwater-dependent habitats, species, and island residents and visitors from sea level rise and other climate change factors is essential for national park managers in the Sandy high impact area. The proposed project will (1) describe baseline conditions and change over time in key attributes of the fresh surface and groundwater resources at FIIS, GATE SHU, and ASIS; (2) develop protocols to assess change; and (3) increase capacity to develop and implement adaptation and mitigation strategies to reduce the impacts on groundwater-dependent habitats and species.

General: barrier islands and spits

Focus: Fire Island National Seashore (FIIS), Sandy Hook unit of Gateway National Recreation Area and Assateague Island National Seashore (ASIS)

Project Components: Compilation of a geographic information system (GIS) of data necessary for updating of an existing USGS shallow groundwater flow model of the Fire Island park unit: topography, bathymetry, hydrogeologic framework, land surface features, water usage, groundwater recharge and discharge, saline surface water dynamics, and field data. Update the Fire Island model and review the model with USGS Cape Cod researchers who are developing a similar model. GIS compilation of Fire Island ecological factors and details of any climate change adaptation strategies that may be available. Conduct climate change scenarios with the updated Fire Island groundwater model and to present a groundwater monitoring plan. Compile a GIS and develop a model of the Sandy Hook park unit and run scenarios in consultation with USGS-NJ. Compile a GIS and develop a model of the Assateague park unit and run scenarios in consultation with USGS-MD. Compare and contrast the three park unit results and review field data which may be collected by this time. Prepare a USGS report draft.

Products/Outcomes: USGS report

Dissemination Strategy:

Project Linkages: At ASIS there is an ongoing NPS-funded project to establish a groundwater monitoring network. The proposed mitigation project will work collaboratively with this ongoing effort with the objective of enhancing the monitoring network and avoiding duplication of effort. Update an existing USGS shallow groundwater flow model of the Fire Island park

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

NPS-6 - Assess Groundwater Resources to Adapt to Climate Change

unit

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input checked="" type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input checked="" type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input checked="" type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input checked="" type="checkbox"/> NY-NJ Harbor
<input checked="" type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

<input type="checkbox"/>	Bathymetic Survey - Bathymetric Data
<input type="checkbox"/>	Built Environment
<input type="checkbox"/>	Collect/Process Elevation Data Including LiDAR
<input type="checkbox"/>	Decision Support Tools
<input type="checkbox"/>	Green Infrastructure
<input type="checkbox"/>	Immediate Impact Assessment
<input checked="" type="checkbox"/>	Increase Monitoring Capability for Future Storms
<input type="checkbox"/>	Information Management Data Portals
<input type="checkbox"/>	Long-term Impact Assessment
<input checked="" type="checkbox"/>	Modeling Future Impacts
<input checked="" type="checkbox"/>	Monitoring Restoration and Management
<input checked="" type="checkbox"/>	Resilience Research
<input type="checkbox"/>	Social Science
<input type="checkbox"/>	Translation/Delivery of Information to Partners
<input type="checkbox"/>	Status
<input checked="" type="checkbox"/>	Trends

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input checked="" type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input checked="" type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input checked="" type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input checked="" type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input checked="" type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input checked="" type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input checked="" type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input checked="" type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input checked="" type="checkbox"/> Ecosystem Response Data	<input checked="" type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

NPS-7 - Breach Management Plans

Project ID: NPS-7 Agency ID: Lead Agency: NPS Project Duration (Yrs): 3

Contact: Patricia Rafferty, patricia_rafferty@nps.gov, 631-687-4747

Theme: Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

Title: Develop Breach Management Plans for Coastal National Seashores to Maximize Ecological Benefits

Summary: This project will develop breach management plans for Fire Island and Assateague Island National Seashores to enable the National Park Service, Army Corps of Engineers and the States of New York and Maryland to react quickly to a breach event within the barrier islands of these National Parks. The Breach Management Plan will be based upon the best available science, balancing the geomorphological, ecological and socio-economic impacts of breaching with the goal of maximizing ecosystem resiliency and insuring public safety.

General: barrier islands

Focus: Fire Island National Seashore (FIIS) and Assateague Island National Seashore (ASIS)

Project Components: The goal of this project is to develop a breach management plan (BMP) for Fire Island National Seashore (FIIS) and Assateague Island National Seashore (ASIS) that will enable the National Park Service (NPS), Army Corps of Engineers (USACE) and the States of New York and Maryland to react quickly to a breach event within the barrier islands of these National Parks.

Products/Outcomes: A breach management plan (BMP) for Fire Island National Seashore (FIIS) and Assateague Island National Seashore (ASIS). Externally peer-reviewed geomorphological, ecological and socio-economic evaluations.

Dissemination Strategy:

Project Linkages: Sandy response funded monitoring of the breach that was opened during Sandy in the FIIS wilderness will contribute to this project. This project will also benefit from the following projects that are proposed under this funding call: Linking Coastal Processes and Vulnerability – Fire Island Regional Study (USGS); Estuarine response to storm forcing (USGS); Evaluate ecological effects of breaching on Great South Bay (NPS).

Theme 5: Impacts to coastal ecosystems, habitats, and fish and wildlife.

NPS-7 - Breach Management Plans

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetric Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-100 - Geostationary Data Assimilation and Product Development

Project ID: NOAA-1 Agency ID: 100 Lead Agency: NOAA Project Duration (Yrs):

Contact: Bill Lapenta, ,

Theme: Theme: NOAA Project

Title: Geostationary Data Assimilation and Product Development

Summary:

General:

Focus:

Project Components: Testing Advanced Baseline Imager (ABI) radiances for global data assimilation and including use of high time and space density data Development and testing of new global and regional cloud products from the respective data assimilation systems, including surface emissivity algorithms Coordinating partner contributions and evaluating results of controlled testing Implementation of new products and techniques into operations Partial funding for NESDIS communications of international geostationary imagery and products

Products/Outcomes: Makes global observing system increasingly robust against loss of JPSS polar-orbiting radiometric data Provides new operational cloudiness product for users Provides important data set over oceanic areas with high time and space density and some potential for improved hurricane track and intensity prediction Increased skill performance of 0.25% as measured by standard verification scores

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-100 - Geostationary Data Assimilation and Product Development

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-101 - Global Model upgrades and ensemble prediction of hurricane tracks

Project ID: NOAA-1 Agency ID: 101 Lead Agency: NOAA Project Duration (Yrs):

Contact: Bill Lapenta, ,

Theme: Theme: NOAA Project

Title: Global Model upgrades and ensemble prediction of hurricane tracks

Summary:

General:

Focus:

Project Components: Enhance skill of global model for weather predictionEnhance global ensembles for use in hurricane and other weather prediction

Products/Outcomes: Improved skill of deterministic high resolution global forecasts by Jan. 30, 2016 (> 5% improvement in hurricane track high resolution guidance, > 5% improvement in precipitation guidance, additional improvements for all high resolution guidance).Improved skill for global ensembles by Jan. 30, 2016 (> 5% improvement in mean of ensemble track guidance, > 5% improvement in probability of precipitation guidance, additional improvements for all other ensemble guidance.).

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-101 - Global Model upgrades and ensemble prediction of hurricane tracks

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-102 - Tropical Cyclone Relocation for NAM

Project ID: NOAA-1 Agency ID: 102 Lead Agency: NOAA Project Duration (Yrs):

Contact: Bill Lapenta, ,

Theme: Theme: NOAA Project

Title: Tropical Cyclone Relocation for NAM

Summary:

General:

Focus:

Project Components: EMC will adapt the storm relocation capabilities used in the global and HWRF systems for the NAM.

Products/Outcomes: A reduction in tropical cyclone initial condition location errors by 10%.Higher accuracy tropical cyclone forecasts in NAM.

Dissemination Strategy:

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-102 - Tropical Cyclone Relocation for NAM

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-103 - Acquire Caribbean Radar Observations

Project ID: NOAA-1 Agency ID: 103 Lead Agency: NOAA Project Duration (Yrs):

Contact: Bill Lapenta, ,

Theme: Theme: NOAA Project

Title: Acquire Caribbean Radar Observations

Summary:

General:

Focus:

Project Components: Identify radar installations in Mexico, Central America, Caribbean and Bahamas most suitable for acquisition at NCEP. Establish real-time and routine delivery and receipt of new radar observations through NWS/IDP to NCEP for eventual use in numerical model initialization. Adapt existing procedures (NSSL's MRMS and EMC's data assimilation) to the new radar observations.

Products/Outcomes: A reduction in tropical cyclone initial condition error if in vicinity of new radars. Higher accuracy tropical cyclone forecast for storms originating in or passing through the area with additional radar observations.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-103 - Acquire Caribbean Radar Observations

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-104 - Cloudy Radiance Assimilation

Project ID: NOAA-1 Agency ID: 104 Lead Agency: NOAA Project Duration (Yrs):

Contact: Bill Lapenta, ,

Theme: Theme: NOAA Project

Title: Cloudy Radiance Assimilation

Summary:

General:

Focus:

Project Components: Develop advanced techniques for assimilation of cloud-impacted microwave and infrared radiances in the operational global data assimilation system, consistent with current development effortsDevelop improved observational error formulations and enhanced quality control techniques for satellite and other operational observationsPrepare and test upgrades in concert with other development candidatesDeliver enhanced system to NCEP/NCO

Products/Outcomes: Increases the amount and spatial coverage of satellite data used in operational data assimilation systemReduces likelihood that erroneous satellite observations will be used by the data assimilation system and so reduces the probability of a poor forecastIncreased skill performance of 2.0% as measured by standard verification scores

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-104 - Cloudy Radiance Assimilation

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-105 - Global 4-D Hybrid Data Assimilation

Project ID: NOAA-1 Agency ID: 105 Lead Agency: NOAA Project Duration (Yrs):

Contact: Bill Lapenta, ,

Theme: Theme: NOAA Project

Title: Global 4-D Hybrid Data Assimilation

Summary:

General:

Focus:

Project Components: Develop, test and implement a 4-D hybrid extension to the current operational 3-D hybrid global data assimilation systemDevelop and test more advanced data assimilation techniques, including addition of stochastic processes to simulate model uncertainty, increased ensemble size, improved balance and noise reduction mechanisms, and improved code integration of ensemble perturbations

Products/Outcomes: Improved use of observations using time continuity and higher resolution analysis incrementsIncreased computational efficiency and reduced code componentsIncreased skill performance of 1.5% as measured by standard verification scores

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-105 - Global 4-D Hybrid Data Assimilation

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-106 - Observing System Experiments

Project ID: NOAA-1 Agency ID: 106 Lead Agency: NOAA Project Duration (Yrs):

Contact: Bill Lapenta, ,

Theme: Theme: NOAA Project

Title: Observing System Experiments

Summary:

General:

Focus:

Project Components: Adapt/build regional (NAM & RAP) OSE test system connected to / driven by output of similar global OSE system to determine impact of data gap & latencyRun regional OSEs for NAM and Rapid Refresh (RAP)

Products/Outcomes: Quantitative impact of data gap/latency on standard forecast scoresOpportunity for analysis of cases of greatest user impact and performance impact

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-106 - Observing System Experiments

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-107 - Operational Implementation Support

Project ID: NOAA-1 Agency ID: 107 Lead Agency: NOAA Project Duration (Yrs):

Contact: Bill Lapenta, ,

Theme: Theme: NOAA Project

Title: Operational Implementation Support

Summary:

General:

Focus:

Project Components: Provide support for operational implementation of software upgrades resulting from R&D sponsored by Sandy Supplement Gap Mitigation (GM) projects

Implementation support includes code management across contributing organizations, assembly of systems for pre-implementation testing, testing itself, analysis of results and code efficiency tuning to meet operational timing deadlines

Products/Outcomes: Enable effective integration of code upgrades from the many GM projects.Support for NCO Senior Program Analyst dedicated to GM projectsEnable on-time implementation(s) to meet expected GM time line (Q2FY16)Resources for coordination and reporting are included in GM project funding

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-107 - Operational Implementation Support

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-108 - Atmospheric Motion Vectors (AMVs)

Project ID: NOAA-1 Agency ID: 108 Lead Agency: NOAA Project Duration (Yrs):

Contact: Bill Lapenta, ,

Theme: Theme: NOAA Project

Title: Atmospheric Motion Vectors (AMVs)

Summary:

General:

Focus:

Project Components: Testing improved AMV products, including hourly winds and high density wind data in the hurricane environmentImproving and validating quality control (QC) techniques and assimilation techniques for high spatial density AMV observationsCoordinating partner contributions and evaluating results of controlled testingImplementation of new products and techniques into operations

Products/Outcomes: Makes global observing system increasingly robust against loss of JPSS radiometric dataProvides important data set for oceanic areas with potential for improved hurricane track and intensity predictionIncreased skill performance of 0.5% as measured by standard verification scores

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-108 - Atmospheric Motion Vectors (AMVs)

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-109 - Marine Debris Assessment and Removal Support

Project ID: NOAA-1 Agency ID: 109 Lead Agency: NOAA Project Duration (Yrs):

Contact: Brendan Bray, ,

Theme: Theme: NOAA Project

Title: Marine Debris Assessment and Removal Support

Summary:

General:

Focus:

Project Components: Modify existing Marine Debris Distribution Model to characterize spatial distribution of Sandy marine debrisConduct Pre and Post Storm imagery comparison to build a rough baseline of impactsPrioritize marine debris objects for removal by collaborating with coastal resource specialists and local, state and federal partners Develop regional contingency plans and rapid response protocols

Products/Outcomes: Coastal managers have better information on submerged or stranded marine debris to support recovery and resilience planning

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-109 - Marine Debris Assessment and Removal Support

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-110 - Enhance Environmental Sensitivity Index maps

Project ID: NOAA-1 Agency ID: 110 Lead Agency: NOAA Project Duration (Yrs):

Contact: Brendan Bray, ,

Theme: Theme: NOAA Project

Title: Enhance Environmental Sensitivity Index maps

Summary:

General:

Focus:

Project Components: Update Environmental Sensitivity Index (ESI) maps for Sandy-impacted areas from South Carolina to Maine. Enhance ESIs as a resource for contingency planning and prioritizing protection strategies during response to a variety of coastal environmental hazards, e.g., oil/chemical spills, severe storms, coastal inundation/SLR, severe marine debris events, etc. Incorporate geospatial attributes of ESI updates into NOAA's Environmental Response Management Application (ERMA)

Products/Outcomes: Coastal managers and responders will have better information on priority protection sites and sensitive species / habitats that should be protected during future coastal environmental hazards along the east coast.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-110 - Enhance Environmental Sensitivity Index maps

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-111 - Skillful Predictions of Seasonal Hurricane Frequency, Track, and Landfall

Project ID: NOAA-1 Agency ID: 111 Lead Agency: NOAA Project Duration (Yrs):

Contact: Brian Gross, ,

Theme: Theme: NOAA Project

Title: Skillful Predictions of Seasonal Hurricane Frequency, Track, and Landfall

Summary: NOAA will develop probabilistic predictions of the level of hurricane activity in carious important regions, such as the east and Gulf coasts, with lead times of months.

General: Investing in future understanding

Focus: Local Storms

Project Components:

Products/Outcomes: After careful evaluation for credibility and utility for NOAA stakeholders, this new capability will be transitioned to NOAA operations.

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-111 - Skillful Predictions of Seasonal Hurricane Frequency, Track, and Landfall

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-112 - Mapping, Charting & Geodesy Services

Project ID: NOAA-1 Agency ID: 112 Lead Agency: NOAA Project Duration (Yrs):

Contact: CAPT Al Girimonte, ,

Theme: Theme: NOAA Project

Title: Mapping, Charting & Geodesy Services

Summary:

General:

Focus:

Project Components: Hire/Train contract support staff to assist with acquisitions, model development, data cleaning, and shoreline extraction

Products/Outcomes: Augmentation of FTE workforce to allow for increased production that expedites deliverables

Dissemination Strategy:

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-112 - Mapping, Charting & Geodesy Services

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-113 - Mapping, Charting & Geodesy Services

Project ID: NOAA-1 Agency ID: 113 Lead Agency: NOAA Project Duration (Yrs):

Contact: CAPT Al Girimonte, ,

Theme: Theme: NOAA Project

Title: Mapping, Charting & Geodesy Services

Summary:

General:

Focus:

Project Components: Upgrade and enhance remote sensing equipment and IT infrastructure

Products/Outcomes: Upgrade to a state-of the art topo-bathy lidar for collection of bathymetric data in waters too shallow for survey vessels. Upgrade and enhance aerial camera systems to the latest technology to allow for increased reliability, oblique imagery collection, and increased capacity for response to large/high impact events

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-113 - Mapping, Charting & Geodesy Services

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-114 - Re-Wing Kit Project

Project ID: NOAA-1 Agency ID: 114 Lead Agency: NOAA Project Duration (Yrs):

Contact: CDR Devin Brakob, ,

Theme: Theme: NOAA Project

Title: Re-Wing Kit Project

Summary:

General:

Focus:

Project Components: Refurbished Outer Wing Assemblies (OWA)Center Wing Box (CWB) structureHorizontal Stabilizer

Products/Outcomes: Provide 7,500 hours of special structural inspection free flight hoursProvide 15,000 hours of flight hoursExtend Service Life 15-20 yearsReduce cost of future Depot level maintenance events

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-114 - Re-Wing Kit Project

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-115 - Series 3.5 Engine Upgrade

Project ID: NOAA-1 Agency ID: 115 Lead Agency: NOAA Project Duration (Yrs):

Contact: CDR Devin Brakob, ,

Theme: Theme: NOAA Project

Title: Series 3.5 Engine Upgrade

Summary:

General:

Focus:

Project Components: Overhaul T56-A-14 engine to "zero" time Incorporate Series III Reliability Enhancements Incorporate Series 3.5 Engine Enhancement Package

Products/Outcomes: 8% fuel savings 10% increase in flight endurance 20% reduction in engine maintenance costs

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-115 - Series 3.5 Engine Upgrade

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-116 - Re-Wing Kit Installation

Project ID: NOAA-1 Agency ID: 116 Lead Agency: NOAA Project Duration (Yrs):

Contact: CDR Devin Brakob, ,

Theme: Theme: NOAA Project

Title: Re-Wing Kit Installation

Summary:

General:

Focus:

Project Components: Install Re-wing Kit on N42RF in conjunction with scheduled Depot Maintenance
Install Re-wing Kit on N43RF in conjunction with scheduled Depot Maintenance

Products/Outcomes: Cost savings on over and above maintenance during typical Depot Maintenance
Cost efficiency completing during scheduled Depot Maintenance

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-116 - Re-Wing Kit Installation

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-117 - Sandy Hook, NJ – Annex Construction

Project ID: NOAA-1 Agency ID: 117 Lead Agency: NOAA Project Duration (Yrs):

Contact: Chien Le, ,

Theme: Theme: NOAA Project

Title: Sandy Hook, NJ – Annex Construction

Summary: Sandy Hook annex construction

General:

Focus:

Project Components: Hurricane Sandy caused extensive damage to the seawater system (part of the lab building), and building 74. Site is part of the NPS' Gateway National Recreation Area. The state of NJ has leases with the NPS; and, leases the NPS' Building 74 and NJ-owned lab. Annex site is proposed on former lab site (burned down in 1985 – arson).

Products/Outcomes: Relocate all NMFS personnel, materials, equipment and operations from the dilapidated Building 74 and consolidate all NOAA campus staff into the James J. Howard Fisheries Lab and the proposed new Annex facility. Construct an office annex

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-117 - Sandy Hook, NJ – Annex Construction

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
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- NH
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- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-118 - NWR Facilities

Project ID: NOAA-1 Agency ID: 118 Lead Agency: NOAA Project Duration (Yrs):

Contact: Craig Hodan, ,

Theme: Theme: NOAA Project

Title: NWR Facilities

Summary:

General:

Focus:

Project Components: Make repairs to approximately 40 NWR sites in Eastern Region that were affected by Hurricane Sandy.

Products/Outcomes: Making these repairs will ensure continued effective operation of this important asset. Repairs started at Charleston, WV NWR - three old towers demolished, new foundation poured and 36.5M tower partially erected.Repairs complete at Joanna Bald, NC – rigging, new antenna and cable

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
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- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-118 - NWR Facilities

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-119 - NWLON Repair

Project ID: NOAA-1 Agency ID: 119 Lead Agency: NOAA Project Duration (Yrs):

Contact: David Lane, ,

Theme: Theme: NOAA Project

Title: NWLON Repair

Summary:

General:

Focus:

Project Components: Assess, repair and/or replace National Water Level Network (NWLON) stations damaged by Hurricane Sandy

Products/Outcomes: Strengthen NWLON real-time automated data acquisition systems to ensure access by the general public, coastal managers, engineers, surveyors, federal and State emergency managers, operations coordinators and other maritime industries. Strengthen infrastructure, support NOS goal of "Positioning America", and help hurricane Sandy affected states and general public. Strengthen data continuity and vertical stability of the NWLON stations.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-119 - NWLON Repair

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-120 - PORTS Repair

Project ID: NOAA-1 Agency ID: 120 Lead Agency: NOAA Project Duration (Yrs):

Contact: David Lane, ,

Theme: Theme: NOAA Project

Title: PORTS Repair

Summary:

General:

Focus:

Project Components: Assess, repair and/or replace Physical Oceanographic Real Time System (PORTS) stations damaged by Hurricane Sandy

Products/Outcomes: Strengthen PORTS automated data acquisition systems to ensure access by partners, maritime industries, the general public, coastal managers, engineers, surveyors, federal and State emergency managers, and operations coordinators. Strengthen infrastructure, support NOS goal of "Positioning America", and help hurricane Sandy affected states and general public. Strengthen data continuity and vertical stability of the PORTS stations.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-120 - PORTS Repair

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-121 - Integrated Rapid-Response Observations and Ocean Ensemble Optimization

Project ID: NOAA-1 Agency ID: 121 Lead Agency: NOAA Project Duration (Yrs):

Contact: David Legler, ,

Theme: Theme: NOAA Project

Title: Integrated Rapid-Response Observations and Ocean Ensemble Optimization to Improve Storm Intensity Forecasts in the Northeast U.S.

Summary: Evaluate the benefits of rapid response observations and advanced ocean modeling for improving storm intensity and surge predictions along the central Atlantic coast.

General: Investing in future understanding

Focus: Observations

Project Components: This work will integrate state-of-the-art ocean observations (air-deployed floats, gliders, and low-cost moorings near the coast) with an ensemble of ocean models focused on understanding the impacts of storm-induced mixing as well as sea level changes near the coast on forecasting of both storm intensity and inundation.

Products/Outcomes:

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-121 - Integrated Rapid-Response Observations and Ocean Ensemble Optimization

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-122 - Modernizing the Tropical Atmosphere/Ocean Observing System

Project ID: NOAA-1 Agency ID: 122 Lead Agency: NOAA Project Duration (Yrs):

Contact: David Legler, ,

Theme: Theme: NOAA Project

Title: Modernizing the Tropical Atmosphere/Ocean Observing System

Summary: Evaluate new, more cost-effective approaches to collect tropical ocean and atmosphere observations that are valuable for seasonal weather forecasts. This activity will specifically fund NOAA's ability to measure sea surface temperatures (SST) and deep ocean temperatures. Sustained observations programs for the ocean are critical for ocean heat content estimates and validating satellite SST info which are used for hurricane intensity and track forecasting. Hurricane track forecasts have improved significantly over the last two decades yet significant intensity forecast errors remain. These errors are critical as evacuation decisions are based on intensity, and if the intensity is wrong, it either costs lives or unneeded evacuations.

General: Investing in future understanding

Focus: Observations

Project Components: Work done under this project will improve the effectiveness and efficiency of the observing system to improve our knowledge of the evolving physical state of the tropical Pacific Ocean, as well as provide an improved equatorial Pacific dataset for researchers and operational ocean state and forecasting applications.

Products/Outcomes: This activity will help improve our understanding of the effectiveness of alternative observing systemns.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-122 - Modernizing the Tropical Atmosphere/Ocean Observing System

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-123 - Next Generation Architecture

Project ID: NOAA-1 Agency ID: 123 Lead Agency: NOAA Project Duration (Yrs):

Contact: David Michaud, ,

Theme: Theme: NOAA Project

Title: Next Generation Architecture

Summary: Acquire fine-grain parallelism HPC architecture to support global atmosphere model development and other R&D activities.

General: Investing in future understanding

Focus: HPC

Project Components: Obtain high performance computer (HPC) capacity on a state-of-the-art, fine-grain parallelism HPC architecture to support global atmosphere/ocean and other modeling activities.

Products/Outcomes:

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-123 - Next Generation Architecture

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-124 - Augmenting Research HPC Resources and Software Engineering

Project ID: NOAA-1 Agency ID: 124 Lead Agency: NOAA Project Duration (Yrs):

Contact: David Michaud, ,

Theme: Theme: NOAA Project

Title: Augmenting Research HPC Resources and Software Engineering

Summary: Increase HPC capacity to improve global weather assimilation and modeling systems to mitigate impact of potential weather satellite data gap.

General: Mitigating Satellite Data Gaps

Focus: HPC

Project Components: NOAA will augment the current R&D HPC system with the purpose of improving global weather assimilation and modeling systems. The augmented system will allow developmental and pre-operational global models to be run routinely and made available for use by US forecasters and commercial weather providers.

Products/Outcomes:

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-124 - Augmenting Research HPC Resources and Software Engineering

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-125 - LMR Consulting Services

Project ID: NOAA-1 Agency ID: 125 Lead Agency: NOAA Project Duration (Yrs):

Contact: David Murray, ,

Theme: Theme: NOAA Project

Title: LMR Consulting Services

Summary:

General:

Focus:

Project Components: Provide strategic advise and support to assist the NWS and NWSEO develop a professional, productive and sustainable management/labor relationship.Determine how to best address perceived inadequacies in the current relationship.Assess current state of management/labor relations in the NWS to identify opportunities for training among both managers and union representatives.

Products/Outcomes: Enable NWS and NWSEO to improve its working relationship in keeping with the true partnership spirit of Executive Order 13522.Achieve consistent pre-decisional involvement sought by the union and increase organizational results sought by management within a climate of mutual trust.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-125 - LMR Consulting Services

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-126 - USGS Gauge Operations and Maintenance (O&M)

Project ID: NOAA-1 Agency ID: 126 Lead Agency: NOAA Project Duration (Yrs):

Contact: Donna Page, ,

Theme: Theme: NOAA Project

Title: USGS Gauge Operations and Maintenance (O&M)

Summary:

General:

Focus:

Project Components: NWS to provide funds to USGS for operations and maintenance of selected river and precipitation gauges in the Susquehanna River basin in the state of New York

Products/Outcomes: Continue the operation of gauges that provide important data for river and flash flood forecasting.

Dissemination Strategy:

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetric Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-126 - USGS Gauge Operations and Maintenance (O&M)

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-127 - NCCOS COL Seawater & Other Facilities Repairs CCFHR Beaufort Laboratory Quad

Project ID: NOAA-1 Agency ID: 127 Lead Agency: NOAA Project Duration (Yrs):

Contact: Eric Livingston, Mike Randall (Beaufort), ,

Theme: Theme: NOAA Project

Title: NCCOS COL Seawater & Other Facilities Repairs CCFHR Beaufort Laboratory Quad

Summary:

General:

Focus:

Project Components: Seawater System: Replace Seawater intake piping and add pumps to provide a consistent supply of water at the required rate of 700 gpm. Also add additional electrical service on the pier to support the new pumps. Cutback existing piping to the shoreline and plug/cap.Lab Roofing: Replace all roofing shingles and underlayment; add exhaust fans on low sloped roofs to provide adequate ventilation as required to obtain warranty; add rafter vents as needed. Design and construct new underground utility infrastructure, approximately 2,000 LF electrical and 2,500 LF telecom, running in "ring" shape around the perimeter of the island. This will also eliminate existing overhead lines that typically fail during storms.Construct new seawall approximately 800 LF running on west side of island between bridge and Duke University property.

Products/Outcomes: Provide adequate and consistent supply of seawater to Lab.Eliminate roof leaks that damage equipment and finishes & prevent mold growth.Underground utility infrastructure will insure continued core mission of lab operations during severe weather.New seawall will eliminate accelerated erosion of the island and continued loss of government property.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-127 - NCCOS COL Seawater & Other Facilities Repairs CCFHR Beaufort Laboratory Quad

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-128 - Hurricane Forecast Improvement Project (HFIP)

Project ID: NOAA-1 Agency ID: 128 Lead Agency: NOAA Project Duration (Yrs):

Contact: Fred Toepfer, ,

Theme: Theme: NOAA Project

Title: Hurricane Forecast Improvement Project (HFIP)

Summary:

General:

Focus:

Project Components: Improve numerical hurricane forecast system to reduce error in track and intensity by 50% (20% in first 5 years) Make better use of observing systems and define requirements for future systems to enhance research and operations capabilities Expand and improve forecaster tools and applications to enhance model guidance

Products/Outcomes: Reduce Unnecessary Evacuations Increase accuracy and reliability of hurricane track and intensity forecasts Extend forecast skill beyond 7 days Improve prediction of rapid intensification; reduce false alarms Overall reduction in preventable losses

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-128 - Hurricane Forecast Improvement Project (HFIP)

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-129 - Improve Gulf-Coast Hurricane Forecast Through Assimilation of Radiance Data

Project ID: NOAA-1 Agency ID: 129 Lead Agency: NOAA Project Duration (Yrs): 2

Contact: Fuzhong Weng, fuzhong.weng@noaa.gov, (301) 683-3574

Theme: Theme: NOAA Project

Title: Improve Gulf-Coast Hurricane Forecast Through Assimilation of Radiance Data

Summary: Improve uses of satellite data from new instruments on board satellites such as Suomi NPP, GCOM-W, and METOP-B in the hurricane weather research and forecast model (HWRF) through a better model initialization and data assimilation system. Presently, the operational HWRF does not use the satellite sounding data directly in its data assimilation system.

General: Improvements in Weather forecasting and hurricane intensity forecasting capabilities

Focus: NWP

Project Components: Algorithm development and implementation of direct assimilation of satellite radiance data from Suomi NPP, GCOM-W, METOP and DMSP satellites in HWRF/GSI system

Products/Outcomes: Improve the intensity/track forecasts of hurricane, especially for the gulf-coast region

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-129 - Improve Gulf-Coast Hurricane Forecast Through Assimilation of Radiance Data

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-130 - Development and Demonstration of a Relocatable Ocean OSSE System

Project ID: NOAA-1 Agency ID: 130 Lead Agency: NOAA Project Duration (Yrs):

Contact: George Halliwell, ,

Theme: Theme: NOAA Project

Title: Development and Demonstration of a Relocatable Ocean OSSE System:
Optimizing Ocean Observations for Hurricane Forecast Improvement and Broader Applications

Summary: Extend ocean Observing System Simulation Experiments (OSSEs) capabilities to cover multiple ocean basins to inform future observing system decisions.

General: Investing in future understanding

Focus: Observations

Project Components: This project will provide ocean heat content maps and ocean temperature, salinity, and velocity profiles collected by hurricane research aircraft. These observations and products will be used to evaluate the new modeled representation of the real ocean generated for the tropical/subtropical Atlantic basin, and also to validate the Observing System Simulation Experiment (OSSE) system within the new domain to demonstrate that credible assessments of ocean observing systems are being generated. The OSSE system recently validated in the Gulf of Mexico will be extended into an expanded tropical/subtropical Atlantic domain to provide NOAA the ability to evaluate new ocean observing systems, and alternate deployments of existing systems, with emphasis on improving hurricane intensity forecasts. Key goals include performing experiments to assist in the planning and evaluation of Sandy Supplemental field experiments, and developing a re-locatable OSSE system for NOAA that can evaluate observing systems for a wide variety of oceanic applications.

Products/Outcomes:

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-130 - Development and Demonstration of a Relocatable Ocean OSSE System

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-131 - Water Level Support for Hydro Surveys

Project ID: NOAA-1 Agency ID: 131 Lead Agency: NOAA Project Duration (Yrs):

Contact: Gerald Hovis , ,

Theme: Theme: NOAA Project

Title: Water Level Support for Hydro Surveys

Summary:

General:

Focus:

Project Components: Activity 1: Validate hydrographic survey data collected with DRA fundsActivity 2: Develop software enhancements to improve efficiency of data processing of hydrographic survey data

Products/Outcomes: Updated tide-coordinated marine charting products.Improve automation, accuracy, and efficiency of contract hydro data validation.

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-131 - Water Level Support for Hydro Surveys

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-132 - Fisheries Disaster Assistance due to Sandy

Project ID: NOAA-1 Agency ID: 132 Lead Agency: NOAA Project Duration (Yrs):

Contact: Harry Mears, ,

Theme: Theme: NOAA Project

Title: Fisheries Disaster Assistance due to Sandy

Summary: Grants to NJ/NY

General:

Focus:

Project Components: Provided grants for "necessary expenses related to fishery disasters...from Hurricane Sandy"

Products/Outcomes: Will be disbursed via equal amounts through grants to NJ and NY to address fishing disaster damage and mitigation

Dissemination Strategy:

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input checked="" type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input checked="" type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-132 - Fisheries Disaster Assistance due to Sandy

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-133 - Upper Air

Project ID: NOAA-1 Agency ID: 133 Lead Agency: NOAA Project Duration (Yrs):

Contact: Hiram Escabi, Jr, ,

Theme: Theme: NOAA Project

Title: Upper Air

Summary:

General:

Focus:

Project Components: Acquisition of additional radiosondes and balloons to replenish upper air supplies used during the Hurricane Sandy event. Evaluation of the operational effectiveness of an automated radiosonde launch capability.

Products/Outcomes: Increase supply of radiosondes and balloons to meet minimum requirements for upper air observations and to support high impact events. Provide capability to automatically launch radiosondes in hard to reach, remote locations.

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-133 - Upper Air

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-134 - NMFS Facilities Maintenance

Project ID: NOAA-1 Agency ID: 134 Lead Agency: NOAA Project Duration (Yrs):

Contact: Jack Emberg, Chien Le, ,

Theme: Theme: NOAA Project

Title: NMFS Facilities Maintenance

Summary: Facilities Repairs/Hardening

General:

Focus:

Project Components: Provided, in part, \$2.373M “to repair and replace ocean observing and coastal monitoring assets damaged by Hurricane Sandy”

Products/Outcomes: Repairs in Annapolis and Sandy Hook, NJ. Also to restore the jetty to protect the existing pier in Woods Hole, MA Jetty footprint will change to protect the (potential) future pier expansion

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-134 - NMFS Facilities Maintenance

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-135 - IOOS QUAD

Project ID: NOAA-1 Agency ID: 135 Lead Agency: NOAA Project Duration (Yrs):

Contact: Jack Harlan , ,

Theme: Theme: NOAA Project

Title: IOOS QUAD

Summary:

General:

Focus:

Project Components: To restore, replace, repair, and enhance the Regional Coastal Ocean Observing Systems in order to return damaged or lost systems to pre-storm operational status. Geographic coverage is the Northeast Atlantic (coastal waters from the Canadian Maritime Provinces to the New York Bight) and Mid-Atlantic (the ocean and estuaries between Cape Hatteras and Cape Cod) regions

Products/Outcomes: Operational and improved and 'hardened' systems allow NOAA to continue its core missions, will perform better during future storms, and support recovery and resilience planning for coastal communities.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-135 - IOOS QUAD

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-136 - Hydrographic Surveys

Project ID: NOAA-1 Agency ID: 136 Lead Agency: NOAA Project Duration (Yrs):

Contact: Jeffrey Ferguson, ,

Theme: Theme: NOAA Project

Title: Hydrographic Surveys

Summary:

General:

Focus:

Project Components: Shallow water hydrographic surveys in areas impacted by SandyCollect data to update nautical charts, support marine debris assessment and support inundation models.

Products/Outcomes: Updated nautical chart products will improve safety of maritime commerceIncreased accuracy of inundation models will improve coastal resiliency

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-136 - Hydrographic Surveys

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-137 - Coastal Inundation Modeling

Project ID: NOAA-1 Agency ID: 137 Lead Agency: NOAA Project Duration (Yrs):

Contact: Jesse Feyen, ,

Theme: Theme: NOAA Project

Title: Coastal Inundation Modeling

Summary:

General:

Focus:

Project Components: Enhancement and transition of large scale, high resolution experimental storm surge models to operationsSupport for high performance computing

Products/Outcomes: Coastal inundation model incorporated into NWS operational forecast products and services for improving accuracy of storm surge forecasts and warningsEmergency and coastal planners have better information to support preparedness/response/resilience planning

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-137 - Coastal Inundation Modeling

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-138 - NWWS and NWR/BMH

Project ID: NOAA-1 Agency ID: 138 Lead Agency: NOAA Project Duration (Yrs):

Contact: Jim McNitt, ,

Theme: Theme: NOAA Project

Title: NWWS and NWR/BMH

Summary:

General:

Focus:

Project Components: Design, implement, and test the NOAA Weather Wire Service (NWWS) , Design/test/implement NOAA Weather Radio (NWR) Broadcast Message Handler (BMH)and deploy to replace the obsolete Console Replacement System (CRS)

Products/Outcomes: Transition of NWWS from CSC to NWS will result in a cost savings to NWSNWWS NLETS and MMS will provide a monitoring capability not currently available in the NWS Telecom Ops Center (TOC)NWR/BMH integrated in AWIPS-II

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- States: CT, DC, DE, MA, MD, ME, NC, NH, NJ, NY, PA, RI, VA

Waterbodies and Areas

- Waterbodies and Areas: Chesapaeake Bay, Delaware Bay, Fire Island, Gulf of Maine, Hudson River, Jamaica Bay, Long Island Bays, Long Island Sound, Marland-Virginia Coast and Bays, New York Bight, NJ Atlantic Coast and Bays, NY-NJ Harbor, Southern New England, Other

Science Category:

- Science Category: Bathymetic Survey - Bathymetric Data, Built Environment, Collect/Process Elevation Data Including LiDAR, Decision Support Tools, Green Infrastructure, Immediate Impact Assessment, Increase Monitoring Capability for Future Storms, Information Management Data Portals, Long-term Impact Assessment, Modeling Future Impacts, Monitoring Restoration and Management, Resilience Research, Social Science, Translation/Delivery of Information to Partners, Status, Trends

Theme: NOAA Project

NOAA-138 - NWWS and NWR/BMH

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-139 - METOP Data Continuity

Project ID: NOAA-1 Agency ID: 139 Lead Agency: NOAA Project Duration (Yrs):

Contact: Jim Silva, jim.silva@noaa.gov, (301) 817-4416

Theme: Theme: NOAA Project

Title: METOP Data Continuity

Summary: NOAA will work with NASA to conduct environmental testing of the US instruments that will fly on Metop-C. These actions will ensure continuity of the KPP measurements from POES/METOP. The current POES budget profile does not support the necessary environmental testing to ensure the US instruments are ready for the FY18 MetOp C launch. These funds will ensure that the mid-morning data needed by NWS and the data required by our international agreements continues. The current AMSU from POES/METOP is the single largest contributor to skill score and would significantly mitigate the impact of a gap. NOAA will refresh and upgrade the POES ground system along with elements of the data processing system to ensure continuity of the Key Performance Parameter (KPP) measurements from POES/METOP.

General: Weather Satellite Data Gap Mitigation

Focus: NWP

Project Components: Environmental testing of U.S. instruments that will fly on METOP-C

Products/Outcomes: Will ensure continuity of the Key Performance Parameter (KPP) measurements from METOP

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-139 - METOP Data Continuity

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-140 - Nautical Charting Support

Project ID: NOAA-1 Agency ID: 140 Lead Agency: NOAA Project Duration (Yrs):

Contact: John Barber, ,

Theme: Theme: NOAA Project

Title: Nautical Charting Support

Summary:

General:

Focus:

Project Components: Charting support to reduce source backlog and prepare for an increased source load of Sandy data Update nautical charts, hydrography and shoreline data in impacted areas

Products/Outcomes: Mariners have updated nautical charts for safe navigation in Sandy affected areas.Coastal managers have better information to support recovery and resilience planning

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-140 - Nautical Charting Support

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-141 - High Impact Weather Prediction Pilot (HIWPP) Project

Project ID: NOAA-1 Agency ID: 141 Lead Agency: NOAA Project Duration (Yrs):

Contact: John Cortinas, ,

Theme: Theme: NOAA Project

Title: High Impact Weather Prediction Pilot (HIWPP) Project

Summary: Descriptions should be short (e.g. a few sentences) but make it clear what the benefits will be.

General: Investing in future understanding

Focus: Global Modeling

Project Components:

Products/Outcomes: Improve the prediction of high-impact weather events, such as hurricanes and outbreaks of severe storms.

Dissemination Strategy:

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-141 - High Impact Weather Prediction Pilot (HIWPP) Project

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-142 - Develop Improved Predictions of Inland Flooding

Project ID: NOAA-1 Agency ID: 142 Lead Agency: NOAA Project Duration (Yrs):

Contact: John Cortinas, ,

Theme: Theme: NOAA Project

Title: Develop Improved Predictions of Inland Flooding

Summary: This project will conduct research to guide the development of a new distributed hydrologic modeling framework.

General: Investing in future understanding

Focus: Local Storms

Project Components:

Products/Outcomes: This project will deliver a state-of-the-science flood prediction system for operational use by the NWS.

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-142 - Develop Improved Predictions of Inland Flooding

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-143 - Evaluating Observing Systems to Improve Storm Prediction

Project ID: NOAA-1 Agency ID: 143 Lead Agency: NOAA Project Duration (Yrs):

Contact: John Cortinas, ,

Theme: Theme: NOAA Project

Title: Evaluating Observing Systems to Improve Storm Prediction

Summary: This internal competition will select projects that will test the best new observing technologies that have the greatest potential to improve atmospheric and/or ocean observations for improved forecast ability.

General: Investing in future understanding

Focus: Observations

Project Components: NOAA and its partners will identify instruments and observing systems that have the potential to significantly improve storm predictions and/or decrease the cost of storm-related observations. The focus of this effort will be the evaluation of instruments and systems during field tests or demonstrations. These funds will be competed to bring the best new observing technologies forward to directly improve weather observations for improved forecast ability. Multiple platforms, including floats, drifters and gliders can provide the observations that are key to understanding the structure of severe storms.

Products/Outcomes:

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-143 - Evaluating Observing Systems to Improve Storm Prediction

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-144 - Social Science of Storm Risk Communication

Project ID: NOAA-1 Agency ID: 144 Lead Agency: NOAA Project Duration (Yrs): 2

Contact: Joshua Brown, Joshua.Brown, 301-7341271

Theme: Theme: NOAA Project

Title: Social Science for Risk Communication of Coastal Storm Hazards

Summary: The National Oceanic and Atmospheric Administration (NOAA) received \$1.832M from the Sandy Supplemental Appropriation to fund targeted social science research and related technology transfer to improve the public response to coastal storm hazard information. The objective of this integrated research and outreach initiative is to better understand the coastal storm hazards warning system, the information it conveys (what, when, how, and by whom) and the factors that affect whether recipients of this information decide to act on it. The program will save lives and promote public safety by creating tools that will better inform people of the true severity of the danger from coastal storm hazards and increase the likelihood that residents who should remove themselves out of harm's way actually do so or take other actions that would prevent them from becoming storm casualties.

General: Investing in future understanding

Focus: Local Storms

Project Components: 1) Primary Grants to CT, NY, NJ Sea Grant Programs; 2) 10 competitively awarded research projects; 3) dedicated outreach staff in each state

Products/Outcomes: 1) Results of 10 original research projects; 2) Outreach products developed for each research project; 3) Synthesis products developed from results of the whole program

Dissemination Strategy: Dedicated outreach staff will work with researchers and NOAA technical liaisons to facilitate results are shared with the agency; Researchers are required to connect projects with end user needs during project development and share results; plan to bring

Project Linkages:

Theme: NOAA Project

NOAA-144 - Social Science of Storm Risk Communication

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-145 - Behaviorally Realistic Communications to Improve the Public's Response to and Preparedness

Project ID: NOAA-1 Agency ID: 145 Lead Agency: NOAA Project Duration (Yrs): 2

Contact: Joshua Brown, Joshua.Brown, 301-7341271

Theme: Theme: NOAA Project

Title: Behaviorally Realistic Communications to Improve the Public's Response to and Preparedness for High Impact Storm Events

Summary: This study will use a mix of surveys and interviews with coastal residents in New Jersey and New York about their beliefs and behavior regarding storm events to develop a personalized online decision-making tool to help them develop strategies to better communicate to the public about high-impact storm events. Climate Central's Surging Seas model will be adapted to include the strategies identified in the initial stages, to improve citizen understanding, preparedness and response to extreme weather.

General: Investing in future understanding

Focus: Local Storms

Project Components: Subcomponent of OAR 12

Products/Outcomes: Subcomponent of OAR 12

Dissemination Strategy: Subcomponent of OAR 12

Project Linkages:

Theme: NOAA Project

NOAA-145 - Behaviorally Realistic Communications to Improve the Public's Response to and Preparedness

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-146 - Assessment of Severe Weather Social Media Usage and a Twitter-based Model

Project ID: NOAA-1 Agency ID: 146 Lead Agency: NOAA Project Duration (Yrs): 2

Contact: Joshua Brown, Joshua.Brown, 301-7341271

Theme: Theme: NOAA Project

Title: Assessment of Social Media Usage During Severe Weather Events and the Development of a Twitter-based Model for Improved Communication of Storm-related Information

Summary: This project will build on social media techniques developed in Mississippi to establish better storm event communication between agencies such as the National Weather Service and emergency managers with residents and coastal communities. The model to be developed will primarily focus on leveraging use of the social media platform Twitter, using information from surveys and analysis of geo-referenced messages sent in the tri-state region before, during and after Sandy and other extreme weather events. The effect on human perceptions and behavior resulting from specific types of messages will be evaluated.

General: Investing in future understanding

Focus: Local Storms

Project Components: Subcomponent of OAR 12

Products/Outcomes: Subcomponent of OAR 12

Dissemination Strategy: Subcomponent of OAR 12

Project Linkages:

Theme: NOAA Project

NOAA-146 - Assessment of Severe Weather Social Media Usage and a Twitter-based Model

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-147 - Audience Segmentation Analysis of CT Coastal Residents to Support Storm Preparedness

Project ID: NOAA-1 Agency ID: 147 Lead Agency: NOAA Project Duration (Yrs): 2

Contact: Joshua Brown, Joshua.Brown, 301-7341271

Theme: Theme: NOAA Project

Title: An Audience Segmentation Analysis of Connecticut Coastal Residents to Support Storm Preparedness

Summary: This project will survey at least 1,000 Connecticut coastal residents to assess their coastal storm risk perceptions, experiences, and behaviors. A better understanding of how much residents understand, their information sources, and why they behave as they do will give emergency planners and responders a better connection to the audiences they serve. Analysis of the survey results will take into account various demographic and social-cultural characteristics to support the design and development of storm-related information tailored to specific subgroups within the public. Results will be provided to Connecticut's emergency managers and responders.

General: Investing in future understanding

Focus: Local Storms

Project Components: Subcomponent of OAR 12

Products/Outcomes: Subcomponent of OAR 12

Dissemination Strategy: Subcomponent of OAR 12

Project Linkages:

Theme: NOAA Project

NOAA-147 - Audience Segmentation Analysis of CT Coastal Residents to Support Storm Preparedness

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-148 - Adolescent and Family Decision Making In Time of Disaster

Project ID: NOAA-1 Agency ID: 148 Lead Agency: NOAA Project Duration (Yrs): 2

Contact: Joshua Brown, Joshua.Brown, 301-7341271

Theme: Theme: NOAA Project

Title: Adolescent and Family Decision Making In Time of Disaster

Summary: A major goal of this study will be to obtain knowledge that will facilitate the creation of educational materials, programs and procedures that improve disaster related family-based decision-making. Creating programs that help adults and adolescents identify their own decision-making and family negotiating styles, know their strengths and weaknesses, and appreciate how each individual impacts the family in disaster situations, can address important human-factor issues that may hinder public efforts to save lives in time of disaster.

General: Investing in future understanding

Focus: Local Storms

Project Components: Subcomponent of OAR 12

Products/Outcomes: Subcomponent of OAR 12

Dissemination Strategy: Subcomponent of OAR 12

Project Linkages:

Theme: NOAA Project

NOAA-148 - Adolescent and Family Decision Making In Time of Disaster

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
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- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-149 - Best Practices in Coastal Storm Risk Communication

Project ID: NOAA-1 Agency ID: 149 Lead Agency: NOAA Project Duration (Yrs): 2

Contact: Joshua Brown, Joshua.Brown, 301-7341271

Theme: Theme: NOAA Project

Title: Best Practices in Coastal Storm Risk Communication

Summary: To assist emergency managers and other communicators deliver the most effective messages possible, this study will survey coastal residents to empirically test the effectiveness of a range of message variables including personalization, storm probability formats and social media messaging. This information will be the basis for developing a validated and tested best practices guide that will serve as an important tool for emergency managers to keep residents of their municipalities safe.

General: Investing in future understanding

Focus: Local Storms

Project Components: Subcomponent of OAR 12

Products/Outcomes: Subcomponent of OAR 12

Dissemination Strategy: Subcomponent of OAR 12

Project Linkages:

Theme: NOAA Project

NOAA-149 - Best Practices in Coastal Storm Risk Communication

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

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- BOEM
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- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

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- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-150 - Understanding and Improving Public Response to NWS Coastal Flooding Forecasts

Project ID: NOAA-1 Agency ID: 150 Lead Agency: NOAA Project Duration (Yrs): 2

Contact: Joshua Brown, Joshua.Brown, 301-7341271

Theme: Theme: NOAA Project

Title: They Had the Facts, Why Didn't They Act?: Understanding and Improving Public Response to NWS Coastal Flooding Forecasts

Summary: New Jersey coastal community residents currently receive information about storm risk from a variety of products and sources in different formats at different times prior to a storm event. The complexity and variety of information leads to confusion and could decrease people's understanding of the full spectrum of risks that they face. Exposure to a briefing document, which combines various pieces of information and provides both graphical information and narrative explanations will improve understanding by the public and emergency management officials of the intensity and range of possible outcomes from an impending coastal storm, and improve the likelihood of people taking evacuation or other proper warning response actions.

General: Investing in future understanding

Focus: Local Storms

Project Components: Subcomponent of OAR 12

Products/Outcomes: Subcomponent of OAR 12

Dissemination Strategy: Subcomponent of OAR 12

Project Linkages:

Theme: NOAA Project

NOAA-150 - Understanding and Improving Public Response to NWS Coastal Flooding Forecasts

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-151 - Measuring public responses to a surge of information

Project ID: NOAA-1 Agency ID: 151 Lead Agency: NOAA Project Duration (Yrs): 2

Contact: Joshua Brown, Joshua.Brown, 301-7341271

Theme: Theme: NOAA Project

Title: Measuring public responses to a surge of information: How individuals understand, react, and respond to storm surge media messages

Summary: To better understand how NY, NJ and CT coastal residents perceive hurricane-related and storm surge-related risk, this research team will work with tri-state broadcasters, as well as partners at the National Hurricane Center and local National Weather Service offices to develop hurricane forecasts that utilize a new storm surge inundation map. The team will conduct focus groups from coastal communities in the three states and use interactive audience response tools to capture participants' real-time response to a televised version of the experimental forecast. Project results will help develop the best methods for practitioners on how to convey visual information about storm-related risk.

General: Investing in future understanding

Focus: Local Storms

Project Components: Subcomponent of OAR 12

Products/Outcomes: Subcomponent of OAR 12

Dissemination Strategy: Subcomponent of OAR 12

Project Linkages:

Theme: NOAA Project

NOAA-151 - Measuring public responses to a surge of information

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetric Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-152 - Forecasting evacuation behaviors of coastal communities in response to storm hazard

Project ID: NOAA-1 Agency ID: 152 Lead Agency: NOAA Project Duration (Yrs): 2

Contact: Joshua Brown, Joshua.Brown, 301-7341271

Theme: Theme: NOAA Project

Title: Forecasting evacuation behaviors of coastal communities in response to storm hazard Information

Summary: In this project, focus groups and in-depth interviews will be used to assess attitudes, knowledge, and behaviors related to both coastal hazards and the products and tools used to both communicate and visualize risks and emergency actions. The experimental design will be a time-dependent discrete choice experiment, where subjects will self report the likelihood of evacuation for each discrete time and hypothetical storm. The researchers will design effective evacuation communication tools and explore the use of smartphone apps to collect data about stated evacuation preferences. Attitudes and response to new sources of information (Twitter and other social media), will be evaluated using sociological theories that integrate concepts such as subjective norms and behavioral control into discrete choice models.

General: Investing in future understanding

Focus: Local Storms

Project Components: Subcomponent of OAR 12

Products/Outcomes: Subcomponent of OAR 12

Dissemination Strategy: Subcomponent of OAR 12

Project Linkages:

Theme: NOAA Project

NOAA-152 - Forecasting evacuation behaviors of coastal communities in response to storm hazard

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-153 - Understanding Responses to Storm Warnings from Those Who “Rode Out” Hurricane

Project ID: NOAA-1 Agency ID: 153 Lead Agency: NOAA Project Duration (Yrs): 2

Contact: Joshua Brown, Joshua.Brown, 301-7341271

Theme: Theme: NOAA Project

Title: Understanding Responses to Storm Warnings: Learning from Those Who “Rode Out” Hurricane Sandy

Summary: This research team will identify the gaps in understanding between coastal managers and the people who could not or would not evacuate during storms, document the perceptions and ‘lived experience’ of those who remained behind and elaborate on the differential vulnerabilities of the non-evacuators, from their own viewpoint, especially as they concern people with disabilities. By working with key stakeholders, the team will conduct focus groups, run surveys and analyze data that will help build training modules. Multiple versions of the modules, tailored for CT, NY and NJ residents, will be in the form of both online tutorials and for classroom use and will be pilot tested with managers.

General: Investing in future understanding

Focus: Local Storms

Project Components: Subcomponent of OAR 12

Products/Outcomes: Subcomponent of OAR 12

Dissemination Strategy: Subcomponent of OAR 12

Project Linkages:

Theme: NOAA Project

NOAA-153 - Understanding Responses to Storm Warnings from Those Who "Rode Out" Hurricane

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-154 - Evaluating evacuation decision-making processes among residents of Long Beach, NY

Project ID: NOAA-1 Agency ID: 154 Lead Agency: NOAA Project Duration (Yrs): 2

Contact: Joshua Brown, Joshua.Brown, 301-7341271

Theme: Theme: NOAA Project

Title: Evaluating evacuation decision-making processes among residents of Long Beach, NY before Superstorm Sandy: Lessons for the role of authority and language in storm Warnings

Summary: This research team will analyze qualitative interviews with residents of ethnically diverse Long Beach, NY, many of whom ignored evacuation warnings before Hurricane Sandy, regardless of the remarkably successful forecasts of the storm track. Researchers will look at both language barriers and cultural attitudes in affecting understanding and acceptance of risk information and use interpreters for extended interviews of ethnic minorities when needed. The goal is to create improved guidelines for the specific language used by government officials and weather authorities to relay coastal storm information, risk assessment, and evacuation recommendations.

General: Investing in future understanding

Focus: Local Storms

Project Components: Subcomponent of OAR 12

Products/Outcomes: Subcomponent of OAR 12

Dissemination Strategy: Subcomponent of OAR 12

Project Linkages:

Theme: NOAA Project

NOAA-154 - Evaluating evacuation decision-making processes among residents of Long Beach, NY

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
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- Long Island Sound
- Marland-Virginia Coast and Bays
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- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
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- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
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- EPA
- FEMA
- FWS
- HUD
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- NPS
- USGS
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Other

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- MARCO
- NROC
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- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-155 - NDBC

Project ID: NOAA-1 Agency ID: 155 Lead Agency: NOAA Project Duration (Yrs):

Contact: Kathleen C. Oneil, ,

Theme: Theme: NOAA Project

Title: NDBC

Summary:

General:

Focus:

Project Components: Replace the 15 existing buoys and deploy 5 additional hurricane buoy stations in the Atlantic and Gulf of Mexico. Deployment of these systems will be funded by the LWF Hurricane buoy and Wx buoy O&M budgets.

Products/Outcomes: Improved observations for hurricane forecasts and research
Decreased the Hurricane Buoy network O&M costs

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
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- Marland-Virginia Coast and Bays
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- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-155 - NDBC

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-156 - Leveraging European Models

Project ID: NOAA-1 Agency ID: 156 Lead Agency: NOAA Project Duration (Yrs):

Contact: Kathy Gilbert, ,

Theme: Theme: NOAA Project

Title: Leveraging European Models

Summary:

General:

Focus:

Project Components: Apply emerging and mature research together with existing techniques in post-processing , as appropriate, to develop a “best product” (BP) from existing numerical guidance informationDevelop and test an improved verification product set that minimizes bias and can, by consensus, be used to verify the BPTest and prepare for implementation an initial BP product set consisting of selected sensible weather elements comprising the National Digital Forecast Database

Products/Outcomes: Provides initial optimized guidance for forecasters and 1% estimated skill increaseProvides improved verification product set for future useIncreases operational capability for multi-model regional products for severe wx

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-156 - Leveraging European Models

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-157 - Coastal Impact Assistance Program

Project ID: NOAA-1 Agency ID: 157 Lead Agency: NOAA Project Duration (Yrs):

Contact: Keelin Kuipers, ,

Theme: Theme: NOAA Project

Title: Coastal Impact Assistance Program

Summary:

General:

Focus:

Project Components: Provide tools , information to support recovery planning efforts at regional, state, community levels including adaptation to climate change, other coastal hazardsEnhance/develop networks to support immediate near-term priority recovery issues of Hazard Resilient Communities and Resilient CoastlinesAssistance for resilience tools, training, technical assistance; support advancement of resilience and climate preparedness policyEconomic assessment : analyze relative levels of protection from inundation, related benefits associated with shoreline rebuilding, restoration alternativesTechnical Assistance Coordinator ensures results shared across impacted area

Products/Outcomes: Communities understand risk, resilience and decision alternatives Communities make risk and economic-based decisions to promote their resilience and support their economic well-being

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-157 - Coastal Impact Assistance Program

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
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- NY
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- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
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- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
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- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-158 - S-NPP Data Processing & Distribution

Project ID: NOAA-1 Agency ID: 158 Lead Agency: NOAA Project Duration (Yrs):

Contact: Keith Amburgey, keith.amburgey@noaa.gov, (301) 817-4106

Theme: Theme: NOAA Project

Title: S-NPP Data Processing & Distribution

Summary: S-NPP was launched in Oct 2011. With current resources, NESDIS has only been able to conduct data processing on an 8/5 basis, rather than 24/7. With funding, S-NPP data processing and distribution will be maintained 24x7 thus reducing the likelihood of a data gap in the distribution of vital products to NOAA and other operational users.

General: Weather Satellite Data Gap Mitigation

Focus: Operations Support

Project Components: Enable 24/7 data processing for S-NPP. (Current level is 8/5)

Products/Outcomes: Reduces likelihood of a data gap in the distribution of vital products to NOAA and other operational users

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
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- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-158 - S-NPP Data Processing & Distribution

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-159 - Geostationary Data (GOES-R & International Missions)

Project ID: NOAA-1 Agency ID: 159 Lead Agency: NOAA Project Duration (Yrs): 3

Contact: Keith Amburgey, keith.amburgey@noaa.gov, (301) 817-4106

Theme: Theme: NOAA Project

Title: Geostationary Data (GOES-R & International Missions)

Summary: The current GOES satellites have IR sounders which are very useful over oceanic regions. The IR sounders will not be available on GOES-R, which will launch with the ABI system. NESDIS will purchase communications and hardware to receive, ingest, and process Himawari 8 data. NWS will develop and implement a capability to assimilate radiance and moisture profile information from US and international geostationary imagers to partially offset the potential loss of the afternoon polar orbit microwave/IR soundings. NOAA will accelerate pre-GOES R launch development activities to ensure these soundings are available during the projected data gap.

General: Weather Satellite Data Gap Mitigation

Focus: NWP

Project Components: NESDIS will purchase communications & hardware to receive, ingest, & process Himawari 8 (H-8) data accessible from JMANWS will develop & implement capability to assimilate radiance & moisture profile information from U.S. & international geostationary imagers (Sandy Supplement Project # NWS-14)

Products/Outcomes: Partially offset the potential loss of afternoon polar orbit microwave/IR sounding data Ensure H8 advanced imager data available to NWP during the projected data gap

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-159 - Geostationary Data (GOES-R & International Missions)

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-160 - Direct Readout Imagery from Other Satellites

Project ID: NOAA-1 Agency ID: 160 Lead Agency: NOAA Project Duration (Yrs): 3

Contact: Keith Amburgey, keith.amburgey@noaa.gov, (301) 817-4106

Theme: Theme: NOAA Project

Title: Direct Readout Imagery from Other Satellites

Summary: NOAA relies on the University of Alaska and Geographic Information Network of Alaska (GINA) to acquire and communicate critical polar orbiting satellite data for its operations. They routinely receive information from US POES, Terra, Aqua and DMSP satellites and they wish to continue to receive data from the Chinese Feng Yun and Russian Meteor satellites through their cooperative agreements with the University of Alaska and GINA. NOAA will review how its operations in Alaska obtain critical satellite data, addressing whether its relationship with the University of Alaska should be strengthened or should alternate paths or backup paths be established to ensure the reliable flow of satellite data to operations.

General: Weather Satellite Data Gap Mitigation

Focus: Alaska Forecasts and Warnings

Project Components: Transform current Direct Broadcast (DB) research system in Alaska into a high-availability (end-to-end satellite reception through WFO delivery) capability to meet operational standards Three components: redundant antenna, redundant processing, and network. Related Projects/ Activities, Coordination: NESDIS-04, NWS-16, JPSS Proving Ground / Risk Reduction

Products/Outcomes: Ensure reliable flow of satellite data to operations

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-160 - Direct Readout Imagery from Other Satellites

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-161 - NWS Ground Readiness

Project ID: NOAA-1 Agency ID: 161 Lead Agency: NOAA Project Duration (Yrs):

Contact: Luis Cano, ,

Theme: Theme: NOAA Project

Title: NWS Ground Readiness

Summary:

General:

Focus:

Project Components: Initiate efforts to ensure NWS infrastructure and data dissemination services are prepared for the threefold increase in model, radar, and new environmental satellite data. Ensure benefits from the billions of dollars invested in National Oceanic and Atmospheric Administration (NOAA) satellites, supercomputing capacities, and radar improvements are realized.

Products/Outcomes: Provide terrestrial network bandwidth and GOES-R receiver antenna upgrades to NWS while improving acquisition, management, and security processes. Execute Satellite Broadcast Network increase from half a transponder to a full transponder to benefit all existing NWS sites with AWIPS, to support increases in data volume.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-161 - NWS Ground Readiness

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
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- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-162 - NWS Data Availability

Project ID: NOAA-1 Agency ID: 162 Lead Agency: NOAA Project Duration (Yrs):

Contact: Luis Cano, ,

Theme: Theme: NOAA Project

Title: NWS Data Availability

Summary:

General:

Focus:

Project Components: GIS Collaboration with Emergency Operations Centers (EOCs): Integration/testing of StormCenter's GIS Collaboration Software (GCS) w/ AWIPS Thin Client system at NWS Weather Forecast Offices (WFOs) and State/Local EOCs. Capability to be demonstrated at Sterling, VA (WFO) and Maryland Emergency Mgmt. Agency (MEMA).

Products/Outcomes: Improved availability and accessibility of NWS data and information (e.g., observations, inundation maps, models, etc.) required for decision support purposes. Improved operational support of EOCs by NWS WFOs and exploitation of GIS data.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-162 - NWS Data Availability

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
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- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-163 - VDatum Upgrades

Project ID: NOAA-1 Agency ID: 163 Lead Agency: NOAA Project Duration (Yrs):

Contact: Manoj Samant , ,

Theme: Theme: NOAA Project

Title: VDatum Upgrades

Summary:

General:

Focus:

Project Components: Activity 1: Install water level stations and collect water level, and ellipsoidal data in NY, NJ, CT, and RI to refine VDatum models to support hydro and shoreline surveys from Rhode Island to New Jersey (CO-OPS)Activity 2: Establish GPS Observations for determining Geodetic to Ellipsoid Relationships at Historic Tidal Gauge Sites (NGS)

Products/Outcomes: General public, coastal managers, engineers, surveyors, federal and State emergency managers and operations have access to updated tidal, geodetic, and ellipsoidal datums in NY, NJ, CT, and RI.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-163 - VDatum Upgrades

Project Locations:

States

- CT
- DC
- DE
- MA
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- ME
- NC
- NH
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- NY
- PA
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- VA

Waterbodies and Areas

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- Long Island Sound
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- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

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- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-164 - WFO Hardening

Project ID: NOAA-1 Agency ID: 164 Lead Agency: NOAA Project Duration (Yrs):

Contact: Mark Burkes, ,

Theme: Theme: NOAA Project

Title: WFO Hardening

Summary:

General:

Focus:

Project Components: Make improvements to harden 24 NWS facilities in Eastern and Southern Regions and reduce the probability that a given WFO would lose forecasting capability during an extreme event and strengthen its service backup ability for neighboring WFOs.

Products/Outcomes: Making these improvements will ensure continued effective operation of these critical assets and improve their ability to function through an extreme event.

Dissemination Strategy:

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-164 - WFO Hardening

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-165 - WFO Repair

Project ID: NOAA-1 Agency ID: 165 Lead Agency: NOAA Project Duration (Yrs):

Contact: Mark Burkes, ,

Theme: Theme: NOAA Project

Title: WFO Repair

Summary:

General:

Focus:

Project Components: Make repairs to 9 NWS facilities in Eastern Region, including Eastern Region HQ and the Sterling Field Support Center, that were affected by Hurricane Sandy.

Products/Outcomes: Making these repairs will ensure continued effective operation of these critical assets and improve their ability to function through an extreme event.

Dissemination Strategy:

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-165 - WFO Repair

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-166 - MRMS Transition to Operations

Project ID: NOAA-1 Agency ID: 166 Lead Agency: NOAA Project Duration (Yrs):

Contact: Mark Miller, ,

Theme: Theme: NOAA Project

Title: MRMS Transition to Operations

Summary:

General:

Focus:

Project Components: Implement Multi-Radar, Multi-Sensor (MRMS) system into NWS operations (primary and backup) Collaborate and coordinate with Integrated Dissemination Program (IDP) and NCEP Central Operations (NCO) to establish hardware, set up code set and meet operational guidelines for implementation

Products/Outcomes: Provides operational critical real-time, low latency, high quality radar-based products for NWS enterprise (WFO and NCEP Service Center forecasters, Environmental Modeling Center, River Forecast Centers) and external users (e.g. FAA) Ensures ongoing development to improve products and build capabilities Leverages other efforts (IDP, National Severe Storms Lab (NSSL) development, etc.)

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-166 - MRMS Transition to Operations

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-167 - Tropical/Extra-Tropical Storm Surge Warning

Project ID: NOAA-1 Agency ID: 167 Lead Agency: NOAA Project Duration (Yrs):

Contact: Mark Tew, ,

Theme: Theme: NOAA Project

Title: Tropical/Extra-Tropical Storm Surge Warning

Summary:

General:

Focus:

Project Components: Fully develop probabilistic hurricane storm surge model (P-Surge)Development of the Storm Surge Warning In AWIPS to operationalize the GIS enabled high resolution inundation graphicsDevelop Probabilistic Extra-Tropical Storm Surge (PETSS) GuidanceOperationalize PETSS post processing and dissemination

Products/Outcomes: Expect reduced number of deaths with hurricanes directly attributed to storm surge by a sizable factor Increase public awareness of storm surge threats and potentially increase lead time for evacuation beyond 48 hours

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-167 - Tropical/Extra-Tropical Storm Surge Warning

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-168 - Storm Surge Training

Project ID: NOAA-1 Agency ID: 168 Lead Agency: NOAA Project Duration (Yrs):

Contact: Mark Tew, ,

Theme: Theme: NOAA Project

Title: Storm Surge Training

Summary:

General:

Focus:

Project Components: Develop storm surge training for NWS forecasters Develop storm surge training to external partners and users

Products/Outcomes: Provide storm surge training to NWS forecasters Provide storm surge training to external partners and users.

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-168 - Storm Surge Training

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-169 - Social Science & Science Infusion Training / DSS Tropical Training

Project ID: NOAA-1 Agency ID: 169 Lead Agency: NOAA Project Duration (Yrs):

Contact: Mark Tew, ,

Theme: Theme: NOAA Project

Title: Social Science & Science Infusion Training / DSS Tropical Training

Summary:

General:

Focus:

Project Components: Develop social science training on tropical impacts and DSS communication techniques with core partners for NWS forecasters. Develop science infusion training for NWP improvements, tropical cyclone science fundamentals, tropical forecasts for DSS and development of tropical cyclones into superstorms. NWS Training Division to develop a Tropical Cyclone Forecast and Warning Professional Development Series (PDS) and deliver initial standardized training for NWS forecasters before start of 2014 hurricane season. NWS Training Division to work with NWS forecasters at coastal sites on developing ways to improve communication by effective translation of tropical weather impacts to core partners.

Products/Outcomes: Provide formal social science training on tropical impacts and DSS communications techniques to NWS forecasters. Provide formal tropical science infusion training to NWS forecasters. Enable the use of tropical DSS WES simulations for NWS forecasters. Provide formal tropical cyclone science fundamentals training to NWS forecasters. Provide training on WFO forecast/warning operations during tropical cyclones to NWS forecasters. Provide tropical DSS training on how to effectively communicate the message to NWS forecasters.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-169 - Social Science & Science Infusion Training / DSS Tropical Training

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-170 - Replace coastal monitoring infrastructure at nine reserves affected by Hurricane Sandy

Project ID: NOAA-1 Agency ID: 170 Lead Agency: NOAA Project Duration (Yrs):

Contact: Michael Migliori, ,

Theme: Theme: NOAA Project

Title: Replace coastal monitoring infrastructure related to NERR System-wide monitoring Program (SWMP) at nine reserves affected by Hurricane Sandy

Summary:

General:

Focus:

Project Components: To replace and repair observing systems, equipment, supplies, and infrastructure that was lost, damaged, or compromised during Hurricane Sandy at nine National Estuarine Research Reserves

Products/Outcomes: Ensure continual monitoring of water quality and meteorological data under normal weather conditions as well as recording episodic storm events such as Hurricane Sandy.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-170 - Replace coastal monitoring infrastructure at nine reserves affected by Hurricane Sandy

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-171 - Mapping, Charting & Geodesy Services

Project ID: NOAA-1 Agency ID: 171 Lead Agency: NOAA Project Duration (Yrs):

Contact: Mike Aslaksen, ,

Theme: Theme: NOAA Project

Title: Mapping, Charting & Geodesy Services

Summary:

General:

Focus:

Project Components: Contract topometric-bathymetric lidar data collection of the shoreline in the highest impact areas (primarily NY/NJ)

Products/Outcomes: Update NOAA Nautical Charts Improved topographic and shallow water elevation information for coastal inundation modeling, floodplain mapping, Coastal Zone Management, habitat mapping, ESI mapping and climate change resiliency Assist with Marine Debris surveying

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetric Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-171 - Mapping, Charting & Geodesy Services

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-172 - Mapping, Charting & Geodesy Services

Project ID: NOAA-1 Agency ID: 172 Lead Agency: NOAA Project Duration (Yrs):

Contact: Mike Aslaksen, ,

Theme: Theme: NOAA Project

Title: Mapping, Charting & Geodesy Services

Summary:

General:

Focus:

Project Components: Contract topometric-bathymetric lidar data collection of the shoreline in the highest impact areas (primarily NY/NJ)

Products/Outcomes: Update NOAA Nautical Charts Improved topographic and shallow water elevation information for coastal inundation modeling, floodplain mapping, Coastal Zone Management, habitat mapping, ESI mapping and climate change resiliency Assist with Marine Debris surveying

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetric Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-172 - Mapping, Charting & Geodesy Services

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-173 - NEXRAD Dual Pol

Project ID: NOAA-1 Agency ID: 173 Lead Agency: NOAA Project Duration (Yrs):

Contact: Mike Istok, ,

Theme: Theme: NOAA Project

Title: NEXRAD Dual Pol

Summary:

General:

Focus:

Project Components: Algorithm development to fully utilize Dual Pol radar capabilityAlgorithm fine-tuning, particularly for rainfall estimates

Products/Outcomes: Improved forecasts, warnings, and decision support services, especially for hurricanes, flash floods, winter storms, thunderstorms, and tornadoes

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-173 - NEXRAD Dual Pol

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-174 - Operational HPC

Project ID: NOAA-1 Agency ID: 174 Lead Agency: NOAA Project Duration (Yrs):

Contact: Mike Kane, ,

Theme: Theme: NOAA Project

Title: Operational HPC

Summary:

General:

Focus:

Project Components: Expand operational supercomputer capacity to 2 petaflops Increase senior production analyst capacity by one contractor

Products/Outcomes: Increase horizontal resolution of GFS from 27 to 10 km to day 10 Increase horizontal resolution of GFS from 55 to 17 km for days 10 through 16 Increase GFS vertical levels from 64 to 128 Make similar improvements to the rest of the model suite

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-174 - Operational HPC

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-175 - X-Band Direct Broadcast Receipt Sites

Project ID: NOAA-1 Agency ID: 175 Lead Agency: NOAA Project Duration (Yrs): 3

Contact: Mitch Goldberg, mitch.goldberg@noaa.gov,

Theme: Theme: NOAA Project

Title: X-Band Direct Broadcast Receipt Sites

Summary: Numerical Weather Prediction is impacted by the amount of data that makes the model runs. Installing X-Band Direct Readout stations will reduce data latency for METOP, GCOM data; hence improving the model performance of the North American Mesoscale and Rapid Refresh Model (RAP) should there be a gap in the afternoon polar orbit Other foreign satellites, such as Chinese FY3 series and Russian data can also be acquired. Infrastructure includes software, hardware, and communication lines. NOAA will upgrade existing Direct Readout sites in AK, HI, CA, FL, and install new sites Puerto Rico and Guam to receive X-Band Direct Broadcast from Metop and future EUMETSAT Polar System Second Generation (EPS-SG) satellites

General: Weather Satellite Data Gap Mitigation

Focus: NWP

Project Components: Install new dual X-L Direct Broadcast (DB) antennas at Monterey, CA, Miami, FL, and Puerto Rico to receive Direct Broadcast from S-NPP, JPSS, POES 15, 16, 18, and 19, NASA EOS, METOP, and foreign satellites, as available with international agreement. Data from these three new DR antennas plus 2 existing NOAA managed antennas (Hawaii and Alaska) and volunteer sites including JMA are made available to CIMSS at the University of Wisconsin which processes and sends products to NSOF for distribution to NCEP for timely assimilation into Numerical Weather Prediction (NWP) models.

Products/Outcomes: Significant reduction in latency of sounder data from multiple polar-orbiting meteorological satellites for NWP use. Provide local DB users with a full suite of sounder satellite products.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-175 - X-Band Direct Broadcast Receipt Sites

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-176 - Nearshore Wave Prediction System (NWPS)

Project ID: NOAA-1 Agency ID: 176 Lead Agency: NOAA Project Duration (Yrs):

Contact: Nicole Kurkowski, ,

Theme: Theme: NOAA Project

Title: Nearshore Wave Prediction System (NWPS)

Summary:

General:

Focus:

Project Components: NCEP/EMC is developing the NWPS in collaboration with a number of WFOs nationwide. The NWPS will provide high-resolution model guidance in the nearshore, produced locally at the WFO level, within the new AWIPS II system. Key products include coastal partitioned wave field guidance and surge and inundation guidance. The NWPS will be implemented nationwide. Funding will provide the necessary contractor support to successfully develop and test the NWPS, as well as the IT hardware needed for optimal performance and efficient on-demand execution of the wave modeling system. Testing of the NWPS will occur at multiple coastal WFOs and Centers.

Products/Outcomes: The NWPS will provide local, on-demand, high resolution nearshore wave model guidance to coastal forecasters in order to produce a higher level of graphical and text-based wave detail information to enhance decision support to the marine community. The NWPS will: allow for configurable spatial resolution; address high-impact issues in the nearshore; include locally advanced wave physics; be driven by forecaster-developed wind grids within the GFE; include wave partitioning.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-176 - Nearshore Wave Prediction System (NWPS)

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-177 - Fisheries Surveys

Project ID: NOAA-1 Agency ID: 177 Lead Agency: NOAA Project Duration (Yrs):

Contact: Rita Curtis, ,

Theme: Theme: NOAA Project

Title: Fisheries Surveys

Summary: Economics and Social Sciences Research

General:

Focus:

Project Components: Provided, in part, "...to provide technical assistance to support State assessments of coastal impacts of Hurricane Sandy"

Products/Outcomes: Will support three surveys to assess extent of recoveryInitial baseline assessment of Community Impacts (completed CY12)Community ImpactMarket Effects

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-177 - Fisheries Surveys

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-178 - Targeted Observations for High Impact Events

Project ID: NOAA-1 Agency ID: 178 Lead Agency: NOAA Project Duration (Yrs):

Contact: Robbie Hood, ,

Theme: Theme: NOAA Project

Title: Targeted Observations for High Impact Events

Summary: Targeted observations from aircraft in oceanic regions can significantly improve how well weather models forecast significant meteorological events such as tropical storms, winter storms and major floods. The long duration and large oceanic areas that can be observed using advanced Unmanned Aircraft Systems (UAS) such as the Global Hawk make this an important potential observing platform.

General: Mitigating Satellite Data Gaps

Focus: Observations

Project Components: NOAA's UAS program will conduct, in cooperation with NASA, missions using advanced UAS to determine their utility in prediction of dangerous storms that can affect the US. This project will quantify the significance of unmanned observations to high impact weather prediction through data impact studies (e.g., OSEs) using unmanned observations collected during prototype operational field missions and OSSEs based on expected unmanned observing capabilities. Additionally, the cost and operational, scientific benefit of unmanned observing technology for high impact weather prediction will be quantified.

Products/Outcomes: This project will determine the observing strategies, and help quantify the contribution that advanced UAS can make to mitigate the satellite data gap.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-178 - Targeted Observations for High Impact Events

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-179 - Observing System Simulation Experiments for Satellite Data Gap Mitigation

Project ID: NOAA-1 Agency ID: 179 Lead Agency: NOAA Project Duration (Yrs):

Contact: Robert Atlas, ,

Theme: Theme: NOAA Project

Title: Observing System Simulation Experiments for Satellite Data Gap Mitigation

Summary: This project will establish a laboratory activity for the quantitative assessment of observing systems in order to enable the most cost-effective decisions relating to the potential JPSS data gap as well as other proposed changes to the global observing system.

General: Mitigating Satellite Data Gaps

Focus: Observatgions

Project Components: NOAA will perform a suite of activities designed to determine the most cost effective observing systems needed to mitigation of the potential satellite gaps. These activities will include Observing System Simulation Exercises (OSSE's), Data Denial Exercises, and cost/benefit comparisons of available observing technologies. Potential future systems such as available from Radio Occultation satellites and geostationary hyper-spectral sounders will be tested using OSSE's to determine the mitigation that would occur if such systems are deployed. NOAA will also study the optimal composite system of available observing to support its mitigation decisions for the satellite data gap. NOAA will formally establish a laboratory activity with HPC resources to conduct OSEs and OSSEs for the purpose of making observing system decisions.

Products/Outcomes: The objectives are to develop the next generation global OSSE (Observing System Simulation Experiement) system and to conduct preliminary OSEs (Observing System Experiments) and OSSEs in support of data gap mitigation.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-179 - Observing System Simulation Experiments for Satellite Data Gap Mitigation

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-180 - DMSP SSMI

Project ID: NOAA-1 Agency ID: 180 Lead Agency: NOAA Project Duration (Yrs): 2

Contact: Sid Boukabara, sid.boukabara@noaa.gov, (301) 763-8251

Theme: Theme: NOAA Project

Title: DMSP Special Sensor Microwave Imager/Sounder (SSMI)

Summary: EMC has completed assimilation algorithms for the Defense Meteorological Satellite Program (DMSP) Special Sensor Microwave Imager/Sounder (SSMIS) data for EMC's global data assimilation and modeling systems and is waiting for HPC upgrades to implement these changes. NOAA will periodically confirm the timeline for implementing these algorithms and ensure other priorities are weighed against the requirement to be prepared for a gap in the polar satellite data.

General: Weather Satellite Data Gap Mitigation

Focus: NWP

Project Components: Low-level effort to improve and optimize the assimilation of DMSP SSMIS data through use of additional channels and antenna scan positions. Work closely with NCEP to help them integrate this effort into future operational implementations

Products/Outcomes: Enhance the added value of assimilating DMSP SSMIS data in our NOAA systems Mitigate the impact of the potential data gap due to the loss or delay of the JPSS afternoon orbit.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-180 - DMSP SSMI

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-181 - HPC Hardware Augmentation for OSSEs

Project ID: NOAA-1 Agency ID: 181 Lead Agency: NOAA Project Duration (Yrs): 3

Contact: Sid Boukabara, sid.boukabara@noaa.gov, (301) 763-8251

Theme: Theme: NOAA Project

Title: HPC Hardware Augmentation for OSSEs

Summary: The JCSDA/NASA supercomputer (JIBB) and the University of Wisconsin Supercomputer (S4) require hardware upgrades so that the latest NWS operational global data assimilation systems can be executed in a timely manner. NOAA will execute a one-time upgrade of HPC systems.

General: Weather Satellite Data Gap Mitigation

Focus: NWP

Project Components: High Performance Computing (HPC) upgrades to keep pace with spatial and vertical resolutions upgrades in NOAA systems JCSDA "JIBB supercomputer at NASA Goddard Space Flight Center NESDIS/University of Wisconsin supercomputer (S4)

Products/Outcomes: Acceleration & expansion of R2O activities with data gap mitigation value Data denial experiments to assess NWP impacts of observing systems & impact of potential gap data Observing System Simulation Experiments (OSSEs) to assess potential impact of future sensors on NWP & their value in mitigating an S-NPP-JPSS data gap

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-181 - HPC Hardware Augmentation for OSSEs

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-182 - MADIS

Project ID: NOAA-1 Agency ID: 182 Lead Agency: NOAA Project Duration (Yrs):

Contact: Steven Pritchett, ,

Theme: Theme: NOAA Project

Title: MADIS

Summary:

General:

Focus:

Project Components: NOAA will accelerate completing the full transition from research to operations of the Meteorological Assimilation Data Ingest System (MADIS) from OAR to NWS. The MADIS will be operated in the NOAA data center at College Park Md. with back up at the backup NOAA data center in Boulder Colorado by the NCO. Hardware has to be acquired for MADIS in the data centers and the transitions from OAR completed

Products/Outcomes: Achieve MADIS Full Operating Capability (FOC) within NWS by the end of FY15Q1. Transition of the ingest and distribution servers from the NWS TOC , and the processing from WCOSS to servers in the NOAA data center.

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-182 - MADIS

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-183 - Increase Aircraft Observations

Project ID: NOAA-1 Agency ID: 183 Lead Agency: NOAA Project Duration (Yrs):

Contact: Steven Pritchett, ,

Theme: Theme: NOAA Project

Title: Increase Aircraft Observations

Summary:

General:

Focus:

Project Components: Expand AMDAR (MDCRS) and WVSS observation coverage over data sparse areas, including internationallyImprove data assimilation techniques for all aircraft observationsInvestigate possibilities of obtaining and assimilating domestic aircraft observations from regional carriersQuantify value of new and existing aircraft observations and data assimilation techniques through impact experiments

Products/Outcomes: High quality aircraft soundings of temperature, wind, and moisture lead to more accurate numerical weather prediction for high impact weather and partially mitigate a potential gap in polar orbiting satellite coverage (JPSS gap)This project will quantify the value of aircraft observations, potentially leading to efficiencies/cost savings in our observational capabilityIncreased skill performance of 1.0% as measured by standard verification scores

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-183 - Increase Aircraft Observations

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-184 - Seamless Digital Elevation Models

Project ID: NOAA-1 Agency ID: 184 Lead Agency: NOAA Project Duration (Yrs): 3

Contact: Susan McLean, susan.mclean@noaa.gov, (303)0497-6478

Theme: Theme: NOAA Project

Title: Seamless Digital Elevation Models

Summary: Funding would enable NGDC to actively partner with the USGS, USACE, and other NOAA to process new Lidar data collected along coastal areas of the northeast US impacted by Hurricane Sandy, develop consistent, seamless nested digital elevation models at 1-meter and 3-meter resolution, and integrate these models into 10-meter resolution bathymetric models to generate an updated seamless depiction of coastal and marine elevation. This directly supports the long term goal of the inter-agency Ocean and Coastal Mapping Working Group to meet the requirements of the OCM-IA and the National Ocean Policy to implement a sustainable seamless depiction of coastal and marine elevation from on-shore through the U.S. EEZ. If implemented and sustained, this effort would lead to a common national digital elevation database supporting storm surge, hurricane, tsunami, habitat, and other coastal processes modeling.

General: Improvements in Weather forecasting and hurricane intensity forecasting capabilities

Focus: Coastal Bathymetry

Project Components: Develop methodology to seamlessly integrate digital elevation models (DEM) Develop improved post-storm DEMs for Sandy-impacted shoreline (NJ-NY)

Products/Outcomes: Improved DEMs support better storm surge and coastal flood modeling, community planning Resultant procedures support attainment of a National Ocean Policy goal for improved mapping products

Dissemination Strategy: Internet accessible

Project Linkages: NOS-04

Theme: NOAA Project

NOAA-184 - Seamless Digital Elevation Models

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-185 - NGDC Data Archive and DEMs

Project ID: NOAA-1 Agency ID: 185 Lead Agency: NOAA Project Duration (Yrs):

Contact: Susan McLean, ,

Theme: Theme: NOAA Project

Title: NGDC Data Archive and DEMs

Summary:

General:

Focus:

Project Components: Ingest and steward Sandy OCM data (data delivered is verified, described with standard metadata, archived, inventoried, and available through appropriate on-line web discovery tools)Discovery of and access to Sandy data and products – provide web-based access to the OCM data and resultant DEM productsDevelop improved integrated discovery and delivery of multi-resolution digital elevation

Products/Outcomes: Sandy supplemental-funded geospatial data available for public use Modelers, coastal managers have high resolution DEMs in Sandy impact region to support recovery and resilience planning

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-185 - NGDC Data Archive and DEMs

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

- AFC
- CSC
- LCC
- MARCO
- NROC
- SHARP
- State
- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-186 - Stellwagen Bank NMS Pier Repair

Project ID: NOAA-1 Agency ID: 186 Lead Agency: NOAA Project Duration (Yrs):

Contact: Ted Lillestolen, ,

Theme: Theme: NOAA Project

Title: Stellwagen Bank NMS Pier Repair

Summary:

General:

Focus:

Project Components: Assess damaged pierRepair pier

Products/Outcomes: Restore pier to fully functioning status to enable safe access to vesselsFacilitate access to the sanctuary via research vessel

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-186 - Stellwagen Bank NMS Pier Repair

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-187 - Leveraging Observations and Models to Improve Predictions of Convective Initiation

Project ID: NOAA-1 Agency ID: 187 Lead Agency: NOAA Project Duration (Yrs):

Contact: Tilden Meyers, ,

Theme: Theme: NOAA Project

Title: Leveraging Observations and Models to Improve Predictions of Convective Initiation

Summary: Improve prediction of initiation of local storms using atmospheric water vapor measurements.

General: Investing in future understanding

Focus: Local Storms

Project Components:

Products/Outcomes:

Dissemination Strategy:

Project Linkages:

Project Locations:

States	Waterbodies and Areas
<input type="checkbox"/> CT	<input type="checkbox"/> Chesapaeake Bay
<input type="checkbox"/> DC	<input type="checkbox"/> Delaware Bay
<input type="checkbox"/> DE	<input type="checkbox"/> Fire Island
<input type="checkbox"/> MA	<input type="checkbox"/> Gulf of Maine
<input type="checkbox"/> MD	<input type="checkbox"/> Hudson River
<input type="checkbox"/> ME	<input type="checkbox"/> Jamaica Bay
<input type="checkbox"/> NC	<input type="checkbox"/> Long Island Bays
<input type="checkbox"/> NH	<input type="checkbox"/> Long Island Sound
<input type="checkbox"/> NJ	<input type="checkbox"/> Marland-Virginia Coast and Bays
<input type="checkbox"/> NY	<input type="checkbox"/> New York Bight
<input type="checkbox"/> PA	<input type="checkbox"/> NJ Atlantic Coast and Bays
<input type="checkbox"/> RI	<input type="checkbox"/> NY-NJ Harbor
<input type="checkbox"/> VA	<input type="checkbox"/> Southern New England
	<input type="checkbox"/> Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-187 - Leveraging Observations and Models to Improve Predictions of Convective Initiation

Project Partners:		Project Data:	
Federal	Other	Data Needed	Data Produced
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC	<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC	<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC	<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO	<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC	<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> HUD	<input type="checkbox"/> State	<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM	<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS	<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> USGS	<input type="checkbox"/> Local	<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO	<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
	<input type="checkbox"/> University	<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
		<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
			<input type="checkbox"/> Fish
			<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-188 - ASOS

Project ID: NOAA-1 Agency ID: 188 Lead Agency: NOAA Project Duration (Yrs):

Contact: Tom Szynborski, ,

Theme: Theme: NOAA Project

Title: ASOS

Summary:

General:

Focus:

Project Components: Make repairs to approximately 27 ASOS sites in Eastern Region that were affected by Hurricane Sandy.

Products/Outcomes: Making these repairs will ensure continued effective operation of this important asset.

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-188 - ASOS

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-189 - Enhanced GRAV-D

Project ID: NOAA-1 Agency ID: 189 Lead Agency: NOAA Project Duration (Yrs):

Contact: Vicki Childers, ,

Theme: Theme: NOAA Project

Title: Enhanced GRAV-D

Summary:

General:

Focus:

Project Components: Collect and release airborne gravity data for coastal blocks from Maine to North Carolina to support more accurate heightsProvide access to a gravimetric geoid that incorporates the collected and processed airborne gravity data

Products/Outcomes: Coastal managers have better information to support recovery and resilience planningStrengthen infrastructure to continue core mission

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
- Modeling Future Impacts
- Monitoring Restoration and Management
- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-189 - Enhanced GRAV-D

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
<input type="checkbox"/> FEMA	<input type="checkbox"/> NROC
<input type="checkbox"/> FWS	<input type="checkbox"/> SHARP
<input type="checkbox"/> HUD	<input type="checkbox"/> State
<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
	<input type="checkbox"/> University

Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-96 - Avionics Upgrades

Project ID: NOAA-9 Agency ID: 96 Lead Agency: NOAA Project Duration (Yrs):

Contact: Alan Goldstein, ,

Theme: Theme: NOAA Project

Title: Avionics Upgrades

Summary:

General:

Focus:

Project Components: Tail Doppler Radar (TDR) upgradesLower Fuselage Radar (LF) upgradesNew Autopilot SystemNose Radar replacementDigital HF radios

Products/Outcomes: Reduced maintenance costs, increased supportability, increased data qualityReduced maintenance costs, increased supportability, increased missionsIncreased missions due to better flight track stability, increased supportabilityIncreased safety, increased supportabilityIncreased safety, reduced maintenance costs

Dissemination Strategy:

Project Linkages:

Project Locations:

States

- CT
- DC
- DE
- MA
- MD
- ME
- NC
- NH
- NJ
- NY
- PA
- RI
- VA

Waterbodies and Areas

- Chesapaeake Bay
- Delaware Bay
- Fire Island
- Gulf of Maine
- Hudson River
- Jamaica Bay
- Long Island Bays
- Long Island Sound
- Marland-Virginia Coast and Bays
- New York Bight
- NJ Atlantic Coast and Bays
- NY-NJ Harbor
- Southern New England
- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
- Collect/Process Elevation Data Including LiDAR
- Decision Support Tools
- Green Infrastructure
- Immediate Impact Assessment
- Increase Monitoring Capability for Future Storms
- Information Management Data Portals
- Long-term Impact Assessment
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- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Theme: NOAA Project

NOAA-96 - Avionics Upgrades

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
<input type="checkbox"/> BOEM	<input type="checkbox"/> LCC
<input type="checkbox"/> EPA	<input type="checkbox"/> MARCO
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<input type="checkbox"/> NOAA	<input type="checkbox"/> State CZM
<input type="checkbox"/> NPS	<input type="checkbox"/> State FWS
<input type="checkbox"/> USGS	<input type="checkbox"/> Local
<input type="checkbox"/> Other Federal	<input type="checkbox"/> NGO
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Project Data:

Data Needed	Data Produced
<input type="checkbox"/> Bathymetric Data	<input type="checkbox"/> Bathymetric Data
<input type="checkbox"/> Biogeochemistry	<input type="checkbox"/> Beach-Marsh-Estuary
<input type="checkbox"/> Coastal water movement	<input type="checkbox"/> Contaminants
<input type="checkbox"/> Demographics	<input type="checkbox"/> Currents
<input type="checkbox"/> Elevation Data	<input type="checkbox"/> Elevation Data
<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Developed-NonDeveloped
<input type="checkbox"/> Long-term verification Data	<input type="checkbox"/> Geology
<input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Hydrology
<input type="checkbox"/> Storm Surge	<input type="checkbox"/> Information Mgmt System
<input type="checkbox"/> Uncertainty assessment data	<input type="checkbox"/> Wind-Precip-Temp
<input type="checkbox"/> Vulnerability to storm surge	<input type="checkbox"/> Surge-Wave-Tide
<input type="checkbox"/> Ecosystem Response Data	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Wildlife	<input type="checkbox"/> Wildlife
	<input type="checkbox"/> Fish
	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-97 - Extreme Precipitation and Flooding from Atmospheric Rivers

Project ID: NOAA-9 Agency ID: 97 Lead Agency: NOAA Project Duration (Yrs):

Contact: Allen White, ,

Theme: Theme: NOAA Project

Title: Extreme Precipitation and Flooding from Atmospheric Rivers

Summary: Improve prediction of extreme precipitation events such as Atmospheric Rivers. This project will demonstrate how Atmospheric Rivers (AR) and other high impact weather events in the Southeast U.S. can be better observed, with a network of Doppler wind profilers and associated instruments; understood, through analysis of the historical record and application of modern forecasting techniques such as reforecasting; and integrated, such that relevant information on ARs and extreme weather events can be shared with all stakeholders, both inside and outside of NOAA.

General: Investing in future understanding

Focus: Local Storms

Project Components: Develop forecast methods and an "Atmospheric River (AR) Portal" to for AR data and tools that will be used by operational weather forecasters. These tools include real-time information, short-term forecasts, medium range forecasts, seasonal outlooks, state-of-the-art research findings, climate projections, and others.

Products/Outcomes:

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-97 - Extreme Precipitation and Flooding from Atmospheric Rivers

Project Locations:

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Waterbodies and Areas

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- Other

Science Category:

- Bathymetic Survey - Bathymetric Data
- Built Environment
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- Resilience Research
- Social Science
- Translation/Delivery of Information to Partners
- Status
- Trends

Project Partners:

Federal

- ACE
- BIA
- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
- USGS
- Other Federal

Other

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- CSC
- LCC
- MARCO
- NROC
- SHARP
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- State CZM
- State FWS
- Local
- NGO
- University

Project Data:

Data Needed

- Bathymetric Data
- Biogeochemistry
- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
- Long-term verification Data
- Sea Level Rise
- Storm Surge
- Uncertainty assessment data
- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
- Beach-Marsh-Estuary
- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
- Surge-Wave-Tide
- Water Quality
- Wildlife
- Fish
- Vegetation

Theme: NOAA Project

NOAA-98 - SLOSH + Gridded Winds

Project ID: NOAA-9 Agency ID: 98 Lead Agency: NOAA Project Duration (Yrs):

Contact: Arthur Taylor, ,

Theme: Theme: NOAA Project

Title: SLOSH + Gridded Winds

Summary:

General:

Focus:

Project Components: Baseline ability to use gridded winds in SLOSH Modify SLOSH Display Program (SDP) to handle gridded winds Bring gridded wind capability into P-Surge and update ETS Explore using other parametric wind models.

Products/Outcomes: Expand possible wind inputs for the SLOSH model beyond it's simplified parametric wind model. Enhances storm surge accuracy (a) for tropical cyclones with two eye walls, (b) for larger storms, (c) in hind cast mode (H*Wind).

Dissemination Strategy:

Project Linkages:

Project Locations:

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Theme: NOAA Project

NOAA-98 - SLOSH + Gridded Winds

Project Partners:

Federal	Other
<input type="checkbox"/> ACE	<input type="checkbox"/> AFC
<input type="checkbox"/> BIA	<input type="checkbox"/> CSC
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Project Data:

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	<input type="checkbox"/> Vegetation

Theme: NOAA Project

NOAA-99 - IOCM Processing Center Support

Project ID: NOAA-9 Agency ID: 99 Lead Agency: NOAA Project Duration (Yrs):

Contact: Ashley Chappell, ,

Theme: Theme: NOAA Project

Title: IOCM Processing Center Support

Summary:

General:

Focus:

Project Components: Integrated Ocean and Coastal Mapping (IOCM) processing center and cooperative institute support for evaluating US Geological Survey (USGS)/US Army Corps of Engineers (USACE) LIDAR shoreline dataAssistance with processing Office of Coast Survey (OCS) hydro and National Geodetic Survey (NGS) shoreline surveys for use in marine debris assessment, and geographic information systems (GIS)

Website product support for public data distribution and reporting

Products/Outcomes: Sandy supplemental-funded geospatial data re-processed for more usesModelers, coastal managers have high resolution data in Sandy impact region to support recovery and resilience planning, marine debris removalBest practices developed for processing, object detection for multiple uses

Dissemination Strategy:

Project Linkages:

Theme: NOAA Project

NOAA-99 - IOCM Processing Center Support

Project Locations:

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Project Partners:

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- BOEM
- EPA
- FEMA
- FWS
- HUD
- NOAA
- NPS
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Other

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- MARCO
- NROC
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- State
- State CZM
- State FWS
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- NGO
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Project Data:

Data Needed

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- Coastal water movement
- Demographics
- Elevation Data
- Infrastructure
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- Sea Level Rise
- Storm Surge
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- Vulnerability to storm surge
- Ecosystem Response Data
- Wildlife

Data Produced

- Bathymetric Data
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- Contaminants
- Currents
- Elevation Data
- Developed-NonDeveloped
- Geology
- Hydrology
- Information Mgmnt System
- Wind-Precip-Temp
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- Water Quality
- Wildlife
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