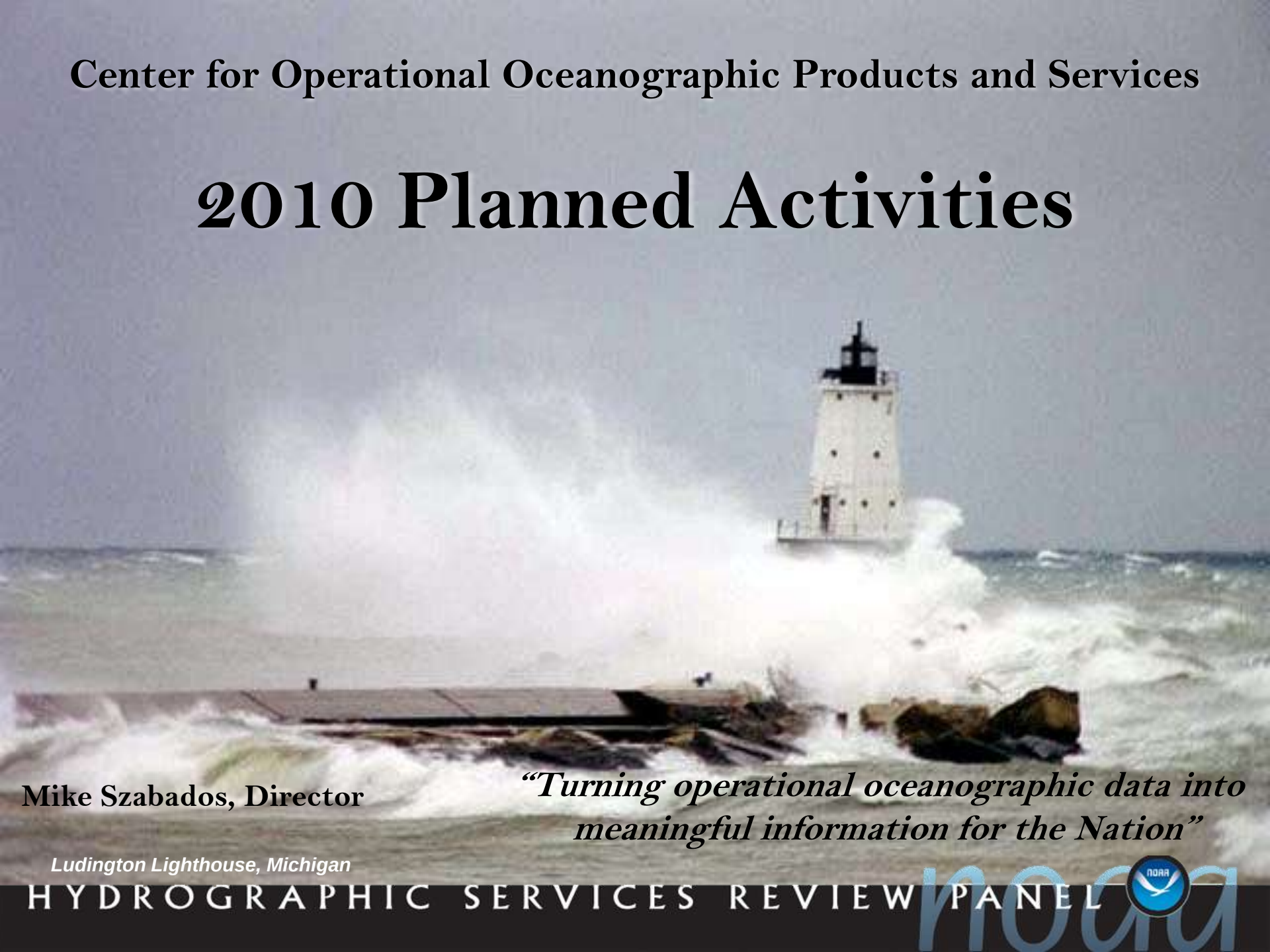
Center for Operational Oceanographic Products and Services

2010 Planned Activities



Mike Szabados, Director

"Turning operational oceanographic data into meaningful information for the Nation"

Ludington Lighthouse, Michigan

HYDROGRAPHIC SERVICES REVIEW PANEL

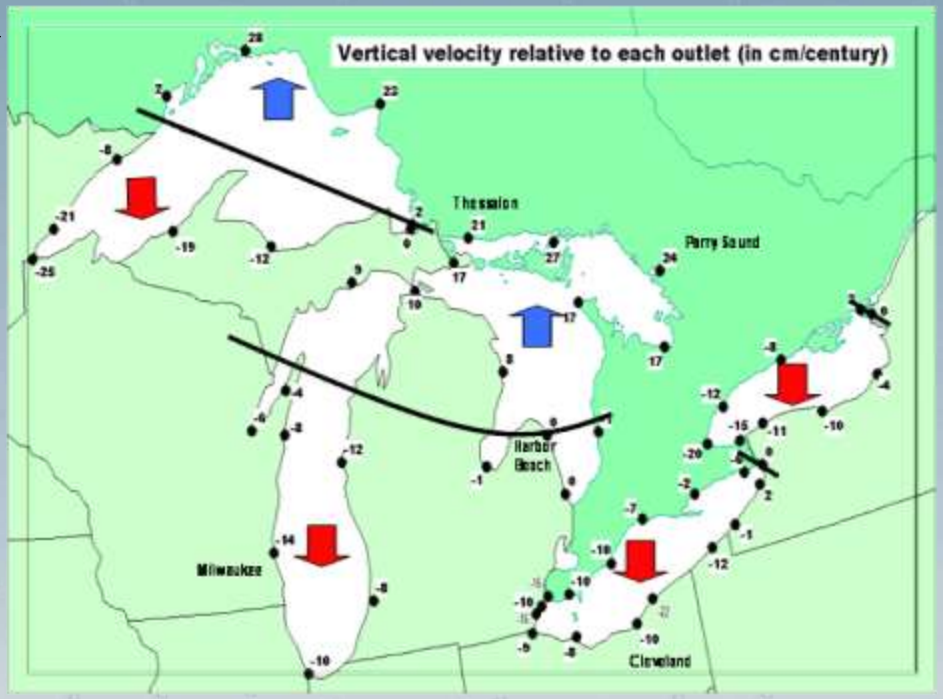
HSRP Most Wanted- Recommendation #1

"Aggressively Map the Nation's Shorelines and Navigationally Significant Waters."

""Aggressively Map the Nation's Shorelines and Navigationally Significant Waters."

Planning for IGLD Update

- IGLD is the vertical reference system used to standardize elevation measurements around the Great Lakes
- A collaboration between:
  - Center for Operational Oceanographic Products and Services (CO-OPS)
  - National Geodetic Survey (NGS)
  - Canada
- Isostatic rebound from the retreat of the glaciers results in movement of the earth's crust. The rate is not uniform over the Great Lakes



HSRP Most Wanted- Recommendation #2

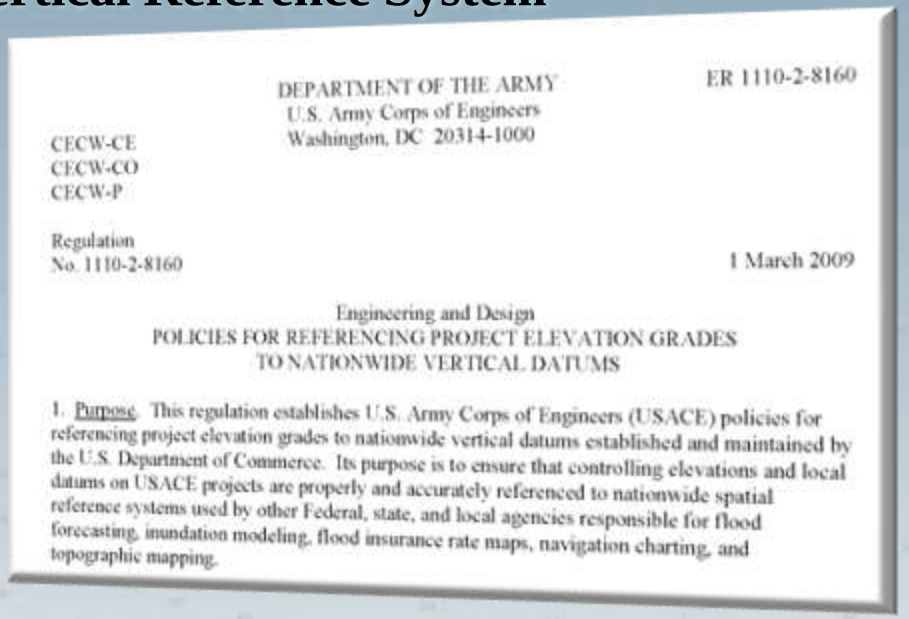
"Integrate Coastal Mapping Efforts and Ensure Federally Maintained Channels, Approaches, and Anchorages Are Surveyed to the Highest Standard."

"Integrate Coastal Mapping Efforts and Ensure Federally Maintained Channels, Approaches, and Anchorages Are Surveyed to the Highest Standard."

NGS and CO-OPS Collaborative Effort Supporting US Army Corps Of Engineers

Supporting the National Vertical Reference System

- Develop a datum guidance Engineering Manual
- Develop datum training modules
- Assisting in developing certification procedures for district datum coordinators



DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
Washington, DC 20314-1000

ER 1110-2-8160

CECW-CE
CECW-CO
CECW-P

Regulation
No. 1110-2-8160

1 March 2009

Engineering and Design
POLICIES FOR REFERENCING PROJECT ELEVATION GRADES
TO NATIONWIDE VERTICAL DATUMS

1. Purpose. This regulation establishes U.S. Army Corps of Engineers (USACE) policies for referencing project elevation grades to nationwide vertical datums established and maintained by the U.S. Department of Commerce. Its purpose is to ensure that controlling elevations and local datums on USACE projects are properly and accurately referenced to nationwide spatial reference systems used by other Federal, state, and local agencies responsible for flood forecasting, inundation modeling, flood insurance rate maps, navigation charting, and topographic mapping.

HSRP Most Wanted- Recommendation #3

"Modernize Heights and Implement Real-time Water Level and Current Observing Systems in All Major Commercial Ports."

"Modernize Heights and Implement Real-time Water Level and Current Observing Systems in All Major Commercial Ports."

Pt. Iroquois water level station

NWLON Expanded to 210 Stations in 2009

Updating Infrastructure in the Great Lakes:

- **5 locations completed as of FY09**
- **2 locations FY10**

"Modernize Heights and Implement Real-time Water Level and Current Observing Systems in All Major Commercial Ports."

Updating Tidal Current Predictions

FY10

- **Long Island Sound , NY (38)**
- **Dutch Harbor, AK (Unimak, Akutan) (22)**
- **Glacier Bay and Cross Sound, AK (11)**

"Modernize Heights and Implement Real-time Water Level and Current Observing Systems in All Major Commercial Ports."

Physical Oceanographic Real-Time System®

PORTS®

FY 2010 Expansion

- New London (21 PORTS®)

FY 2009

- Lake Charles
- Lower Mississippi

HSRP Most Wanted- Recommendation #3

"Modernize Heights and Implement Real-time Water Level and Current Observing Systems in All Major Commercial Ports."

HSRP Most Wanted- Recommendation #4

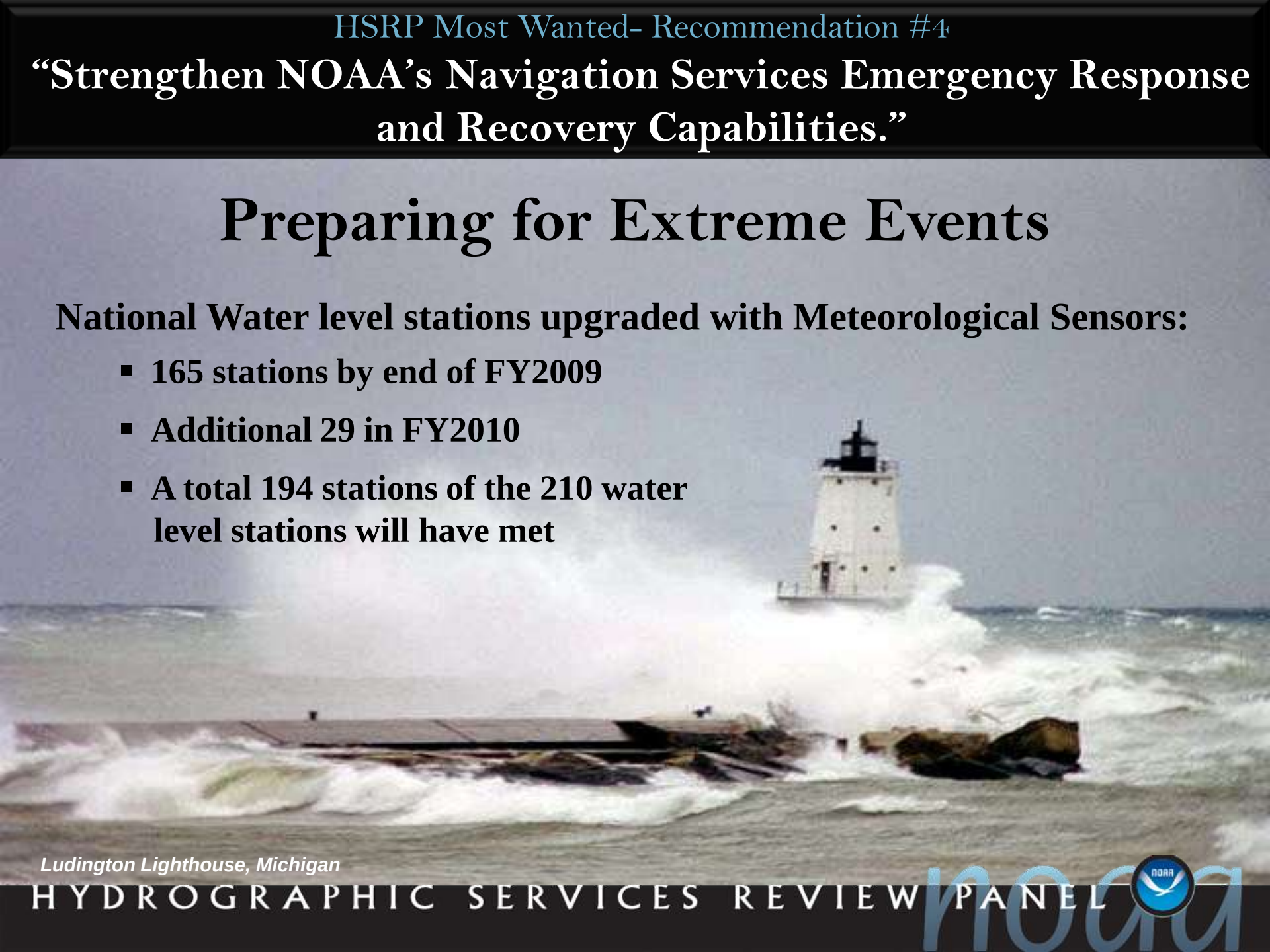
"Strengthen NOAA's Navigation Services Emergency Response and Recovery Capabilities."

"Strengthen NOAA's Navigation Services Emergency Response and Recovery Capabilities."

Preparing for Extreme Events

National Water level stations upgraded with Meteorological Sensors:

- **165 stations by end of FY2009**
- **Additional 29 in FY2010**
- **A total 194 stations of the 210 water level stations will have met**



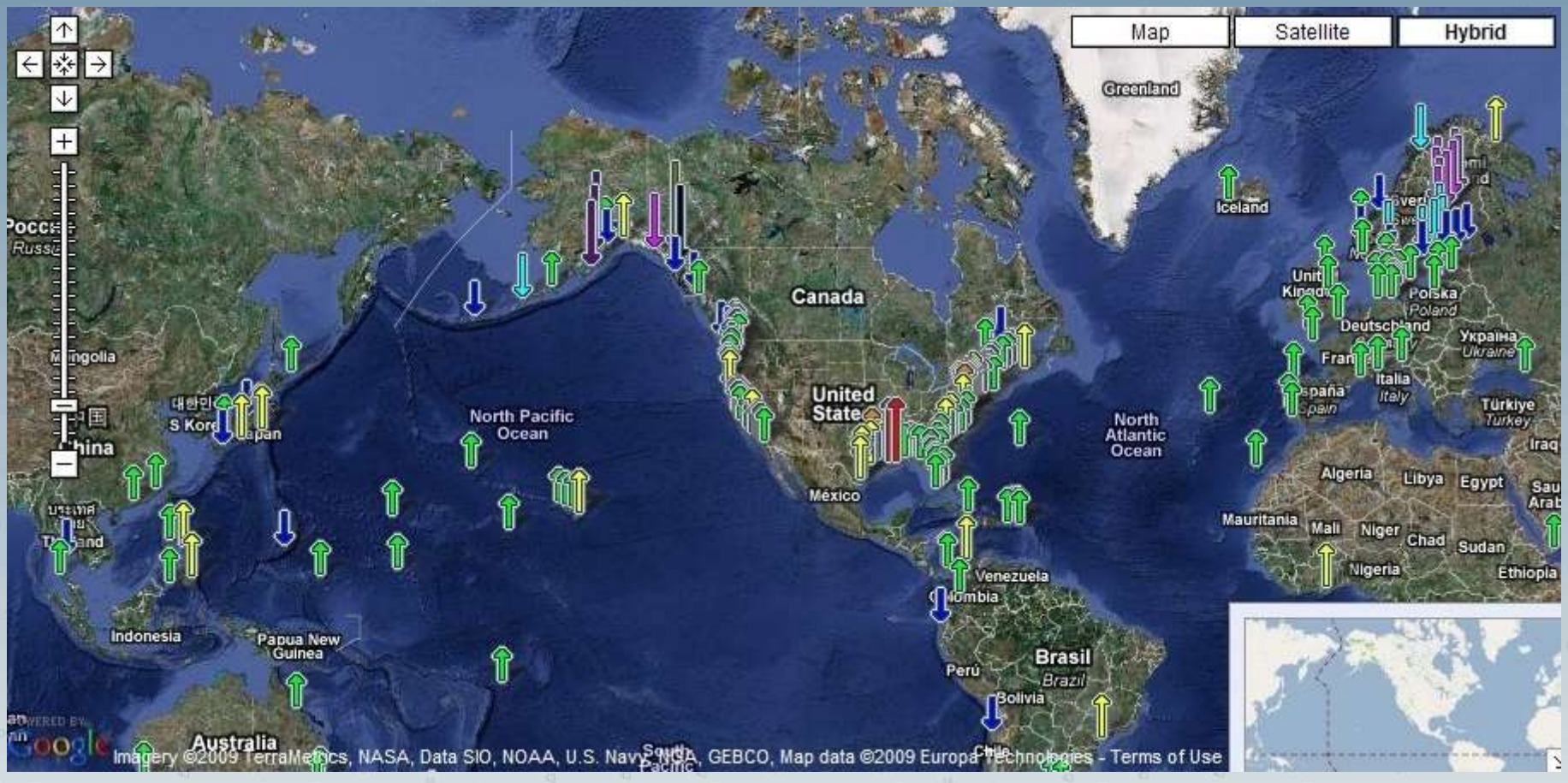
Ludington Lighthouse, Michigan

HSRP Most Wanted- Recommendation #5

"Disseminate NOAA's Hydrographic Services Data and Products to Achieve Greatest Public Benefit."

"Disseminate NOAA's Hydrographic Services Data and Products to Achieve Greatest Public Benefit."

Enhanced *Sea Levels Online* Web Product



HSRP Most Wanted- Recommendation #5

"Disseminate NOAA's Hydrographic Services Data and Products to Achieve Greatest Public Benefit."

TIDES & CURRENTS

News and Alerts

[2009-08-28]
NOAA Report Explains Sea Level Anomaly this Summer along the Atlantic Coast

[2009-07-02]
East Coast water levels running above predictions

ALERT: East Coast water levels are currently running above predicted tides

Starting in early June 2009, observed tides have been increasingly elevated above predicted tidal elevations along the entire U.S. East Coast from Maine to the east coast of Florida. During the period from June 19 thru June 24 for instance, these water levels were running between 0.6 to 2.0 feet above normal depending upon location. As of July 1, these anomalies continue, but running lower at 0.3 to 1.0 ft. above normal. It is not unusual for smaller regions and estuaries along the U.S. East Coast to experience this type of anomalous event at this time of year, however the fact that the geographic extent of this event that includes the entire East Coast event is anomalous. CO-OPS will continue to monitor this event and will provide further information on the causes, amplitudes, geographic extent, and the duration of the event.

For further information, please contact:

User Services
Center for Operational Oceanographic Products and Services (CO-OPS)
1305 East-West Highway
Silver Spring, MD 20910-3281
E-mail: User Services

Back to Tides & Currents

NOAA Technical Report NOS CO-OPS 051

ELEVATED EAST COAST SEA LEVEL ANOMALY: June – July 2009

Silver Spring, Maryland
August 2009

noaa National Oceanic and Atmospheric Administration
U.S. Department Of Commerce
National Ocean Service
Center for Operational Oceanographic Products and Services

http://tidesandcurrents.noaa.gov/publications/EastCoastSeaLevelAnomaly_2009.pdf

"Disseminate NOAA's Hydrographic Services Data and Products to Achieve Greatest Public Benefit."

National Survey of Customer Satisfaction

A National Survey was conducted by CFI Group to measure customer satisfaction of CO-OPS' Products and Services

Goals

- Measure customer satisfaction with current products and services
- Gain insight for future areas of focus

Summary Findings

CO-OPS score of **82.1** is significantly higher than the Federal Government American Customer Satisfaction Index score of **68.9**.

Accuracy and timeliness are repeatedly the highest scoring attributes of CO-OPS products and services.

CO-OPS Budget

$Thousands	2009 Enacted	2010 Request	2010 House	2010 Senate
Tide & Current Base	$28,808	$29,278	$29,278	$29,278
PORTS O&M	$2,498	$0	$0	$3,800
Stimulus (ARRA)	$2,354	$0	$0	$0
TOTAL	**$33,660**	**$29,278**	**$29,278**	**$33,078**

Use of Stimulus (ARRA) funds

- $1,882K - 3 year contract to develop a system to allow external users to access CO-OPS computers and standardized algorithms via the internet in order to submit water level data sets and associated metadata, conduct quality control, and generate a wide array of water level derived products

- $346K - 2 year contract to support processing of additional hydrographic data collected by Coast Survey contractors