NOAA’s Navigation Services in Support of Harbor Safety

David M. Kennedy
National Oceanic & Atmospheric Administration
May 2, 2012
AAPA Harbors & Navigation Committee Meeting
Positioning America for the Future

- Safe, strong and efficient commerce
- Prepared and resilient communities
- Vital and productive environments
Providing accurate, precise, and up-to-date data for a dynamic transportation system.
Safe, strong and efficient commerce

- Global positioning
- Water levels, tide predictions, and other ocean observations
- Nautical charts
- Reopening ports after storms
Positioning

Modernizing the National Spatial Reference System

- CORS
- Height Modernization
- GRAV-D
- COASTAL

Products and Services

- Airport Surveys
- OPUS
- VDatum
- GPS Satellite Orbits
- Shoreline Mapping
- State Advisor Program
- Emergency Response Imagery
Surveying and Charting

Cutting-edge technology and innovative products
Measures and disseminates observations and predictions

- Water levels
- Currents
- Salinity
- Air gap
- Meteorological parameters
- Visibility
- Waves
Physical Oceanographic Real-Time System®
PORTS®

Operational PORTS (20)
FY2012 PORTS (3)

- Humboldt Bay
- Cherry Point
- Port of Anchorage
- Port of New London
- San Francisco Bay
- Lower Columbia River
- Northern Gulf of Mexico OFS
- Gulfport
- Lake Charles
- New Orleans
- Houston/Galveston Bay
- Sabine/Neches
- Mobile
- Pascagoula
- New Haven
- New York/New Jersey
- Delaware Bay
- Narragansett Bay
- Chesapeake Bay
- Tampa Bay
- Los Angeles/Long Beach
- Port of Anchorage

Map showing locations of Operational and FY2012 PORTS.
Benefits of PORTS®

Houston / Galveston, TX
- 60% reduction in tugs and tows groundings
- 50% reduction in ship groundings
- Estimated $20.1 million in annual economic benefits

Tampa Bay, FL
- 10% reduction in recreational distress calls
- 50% reduction in ship groundings
- Estimated $10.1 million in annual economic benefits

New York / New Jersey
- Over 50% reduction in ship groundings
- Estimated $13.2 million in annual economic benefits

Lower Columbia River, OR, WA
- Estimated $7.6 million in annual economic benefits

Statistics based on economic studies by Hauke Kite-Powell, Woods Hole Oceanographic Institution
Regional Planning and Response

Hydrographic vessels survey ports and channels, searching for shoaling and submerged debris

Regional Navigation Managers provide on-the-ground coordination between NOAA, other Feds, and port officials

Navigation response teams and NOAA survey ships, if available, conduct surveys
NOS Engagement in HSC/AMSCs

Purpose/Benefits:
- Maintain relationships w/ other Feds, Port, and State officials
- Report on Dangers to Navigation and other hydro survey findings
- Involvement in Port Maritime Infrastructure Recovery Plans
- Provide updates or solicit needs/feedback on PORTS
- Solicit stakeholder input on survey needs and priorities
- Provide info on status of surveys and nautical chart updates
- Serve as liaison between maritime community and other NOAA offices (e.g. Weather, Fisheries, Sanctuaries)
- Educate stakeholders on NOAA products and services
Coastal Resiliency

Infrastructure vulnerability to:

- Coastal storms (e.g. hurricanes)
- Storm surge inundation
- Sea level rise
- Tsunamis

Solutions:

- Decision-support tools for infrastructure planning, risk assessment, and collaboration
- Technical assistance
- Training
- Management strategies for adaptation, risk communication, hazard response/recovery
Summary

• NOAA provides support for safe, strong, and efficient maritime commerce and ensures our Nation’s economy keeps moving.

• NOAA continues to work with the other Federal agencies and our partners to improve regional harbor safety and support safe, strong and efficient maritime commerce.
QUESTIONS?

Thank You.
David M. Kennedy
Assistant Administrator, National Ocean Service
NOAA