

National Ocean Service Priorities: Coastal Intelligence and Resilience in the Southeast U.S.

Russell Callender, Ph.D.
Deputy Assistant Administrator
NOAA's National Ocean Service

HSRP Charleston

September 16, 2014



NOS Priorities and Outcomes

Coastal Resilience

Better capacity to respond

Improved community preparedness and response

Natural-based infrastructure utilized in coastal communities

Coastal Intelligence

Integrated support tools for port communities

Regional prediction of total water inundation

Early warnings for ecological hazards

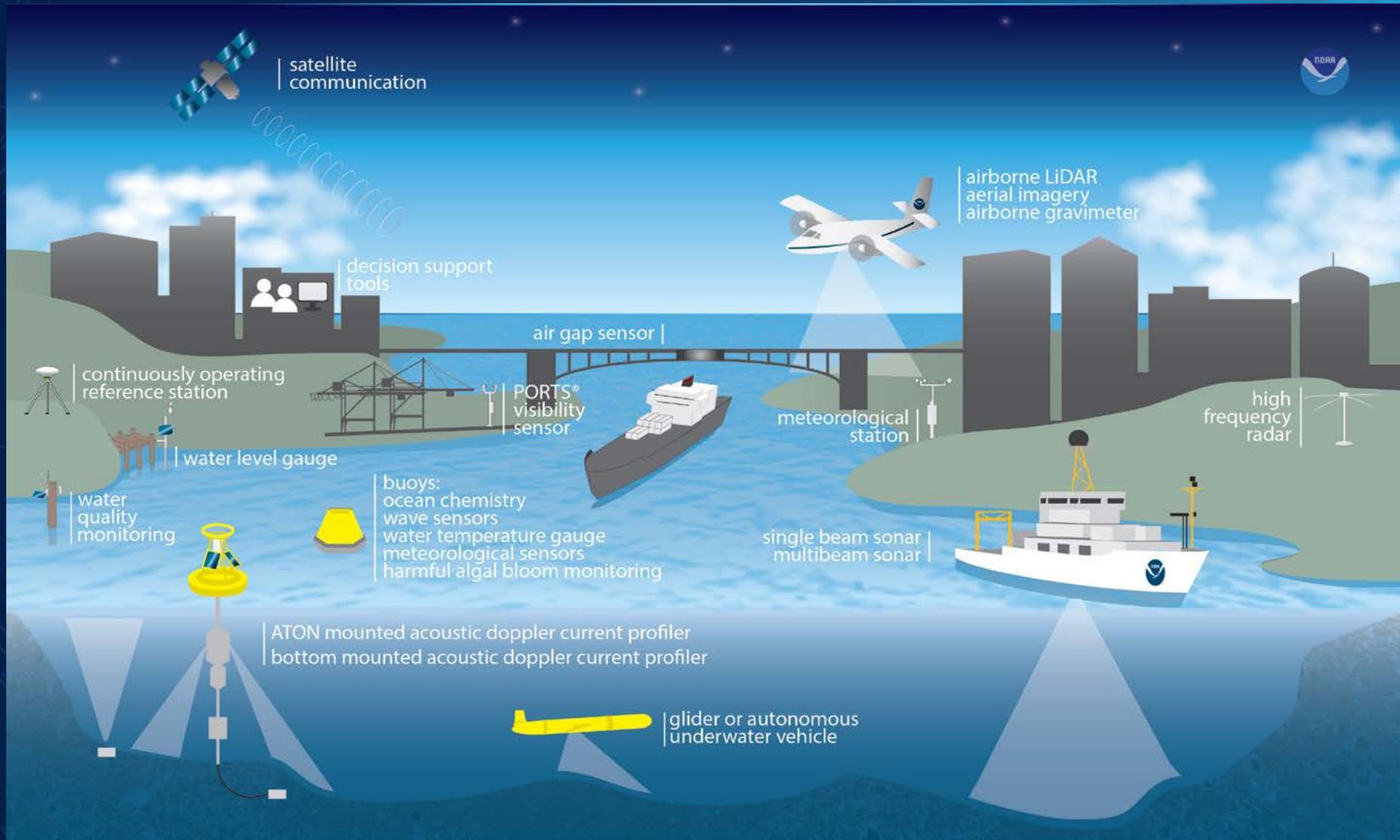
Place-based Conservation

More protection for special places

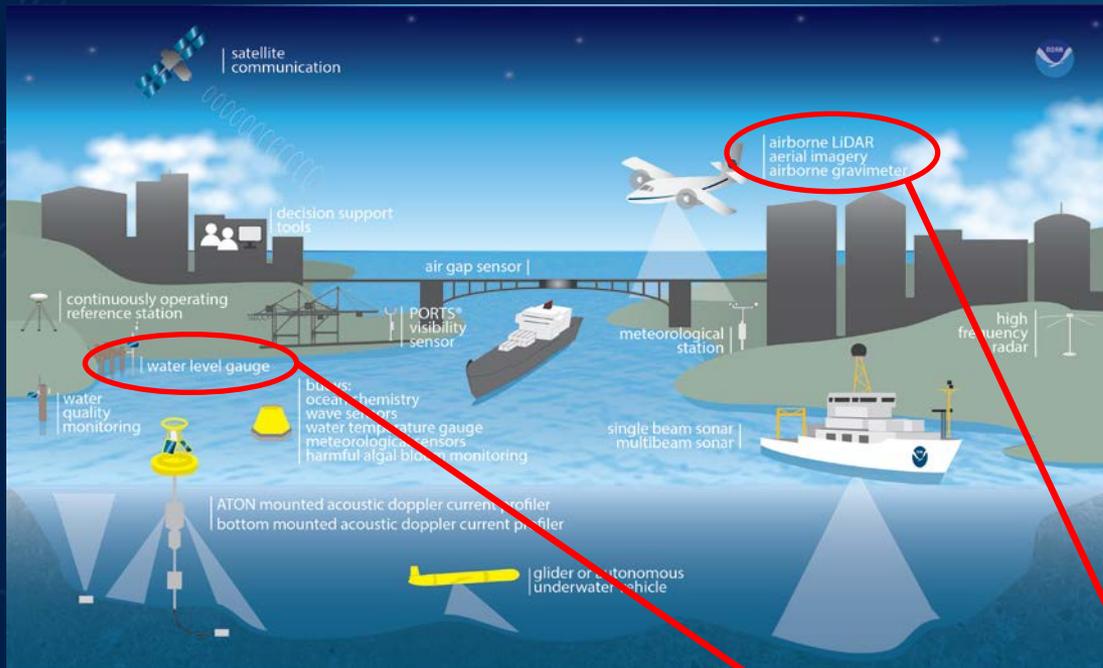
Better management for special places



Coastal Intelligence



NOS Provides Coastal Intelligence

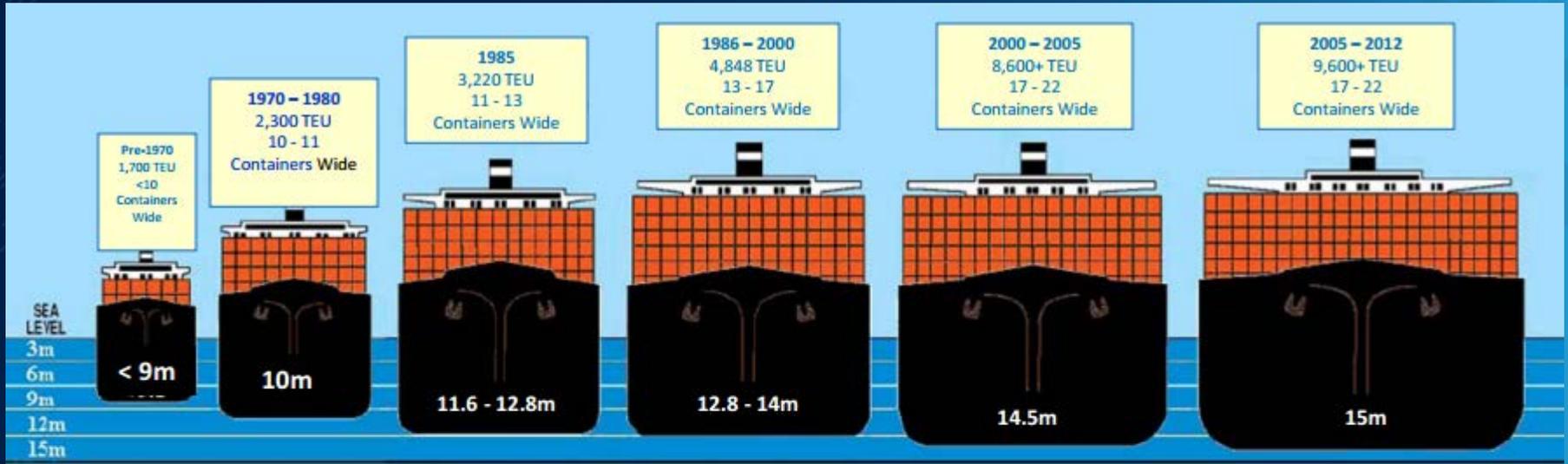


Observation System (Ranked Order)	Agency
1. Global Positioning System (GPS) satellites	DOD/USAF
2. Next Generation Weather Radar (NEXRAD)	DOC/NOAA
3. Landsat satellite	DOI/USGS, NASA
4. Geostationary Operational Environmental Satellite System (GOES-NOP)	DOC/NOAA
5. National Agriculture Imagery Program (NAIP)	USDA/FSA
6. Airborne LIDAR	DOC/NOAA, DOD/USACE, DOI/USGS, NSF
7. Forest Inventory and Analysis (FIA)	USDA/USFS
8. Aircraft Meteorological Observations (e.g., MDCRS, AMDAR)	DOC/NOAA, Non-USG
9. National Water Level Observation Network (NWLON)	DOC/NOAA
10. Terra satellite	NASA

National Plan for Civil Earth Observations Released: July 2014



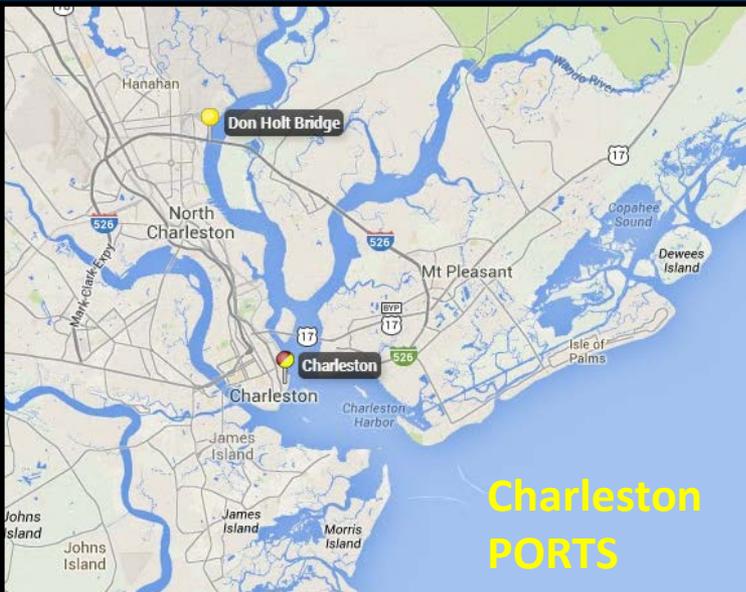
Why Does it Matter?



Value of Coastal Intelligence



Jacksonville PORTS



Charleston PORTS

The Value of **PORTS**[®] to the Nation

How Real-time Observations Improve Safety and Economic Efficiency of Maritime Commerce

National Oceanic and Atmospheric Administration
U.S. Department of Commerce



Coastal Intelligence → Resilience

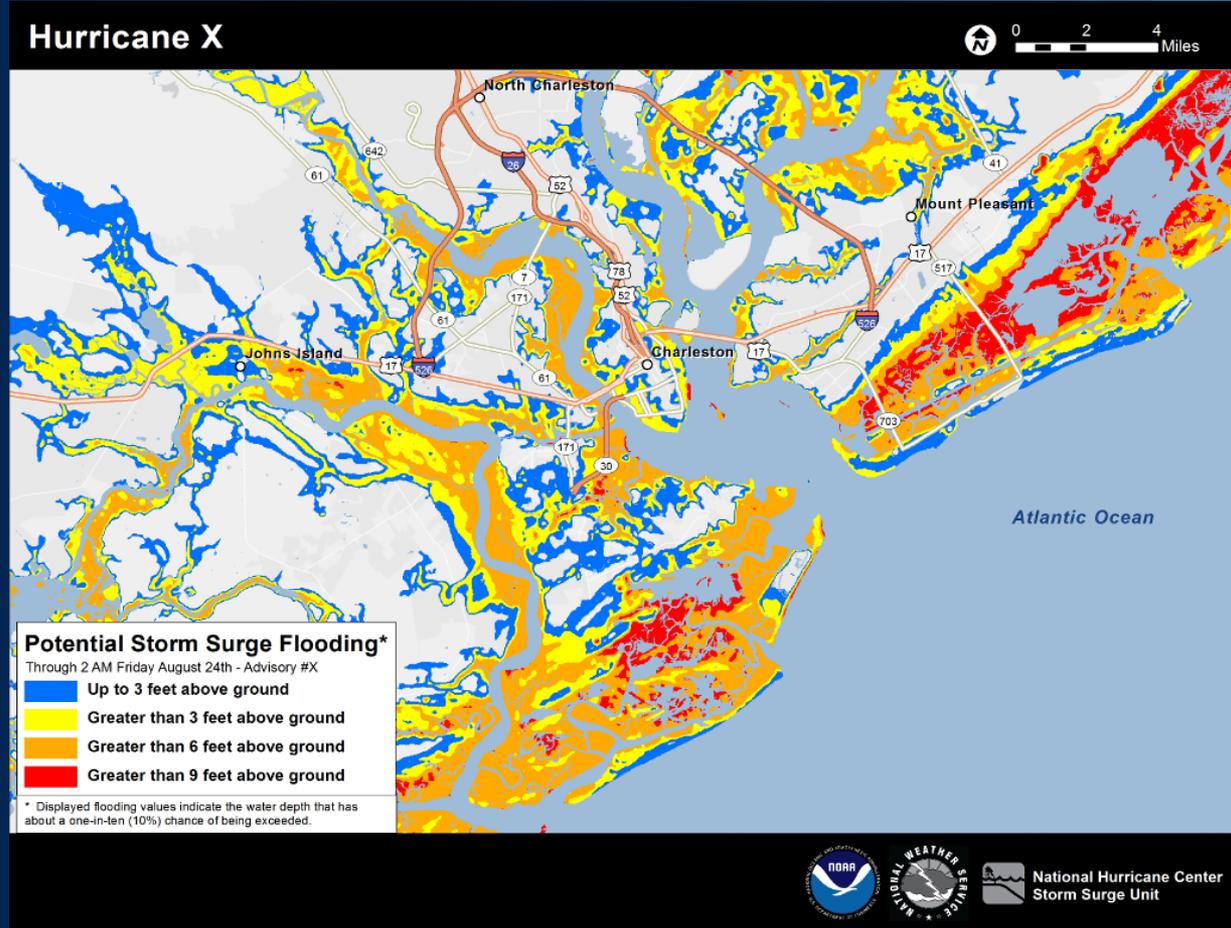
Before



After (5 ft. SLR)

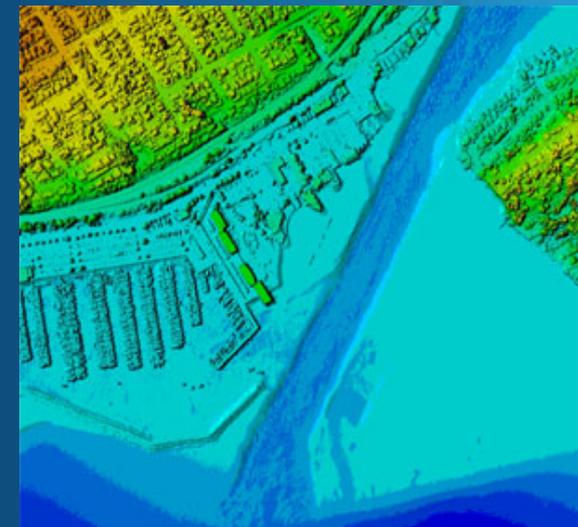
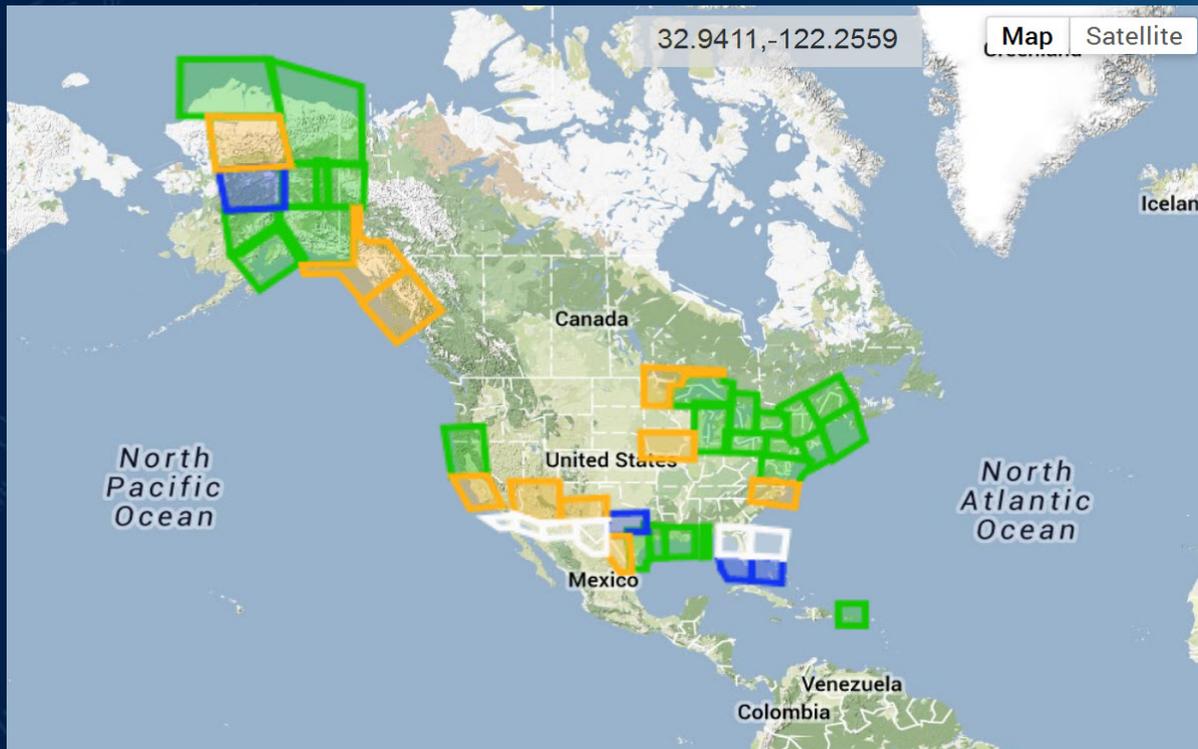


Storm Surge Forecasts



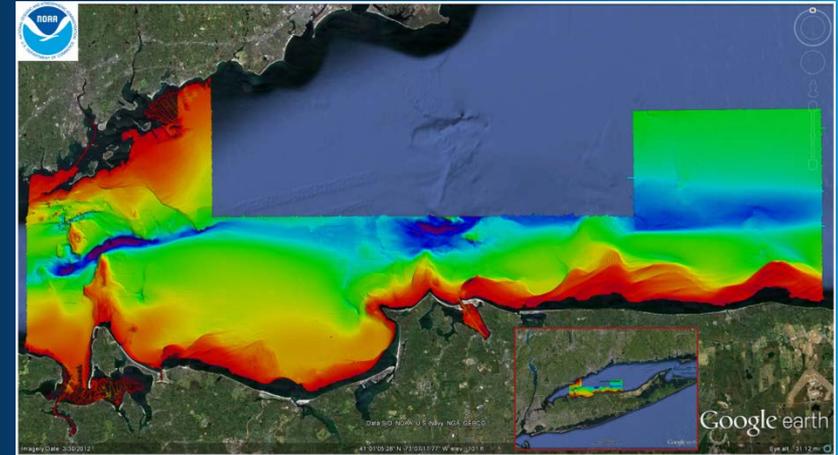
Future of Coastal Intelligence

- Lower costs & more efficiency
- Increased accuracy
- Capacity for multi-use



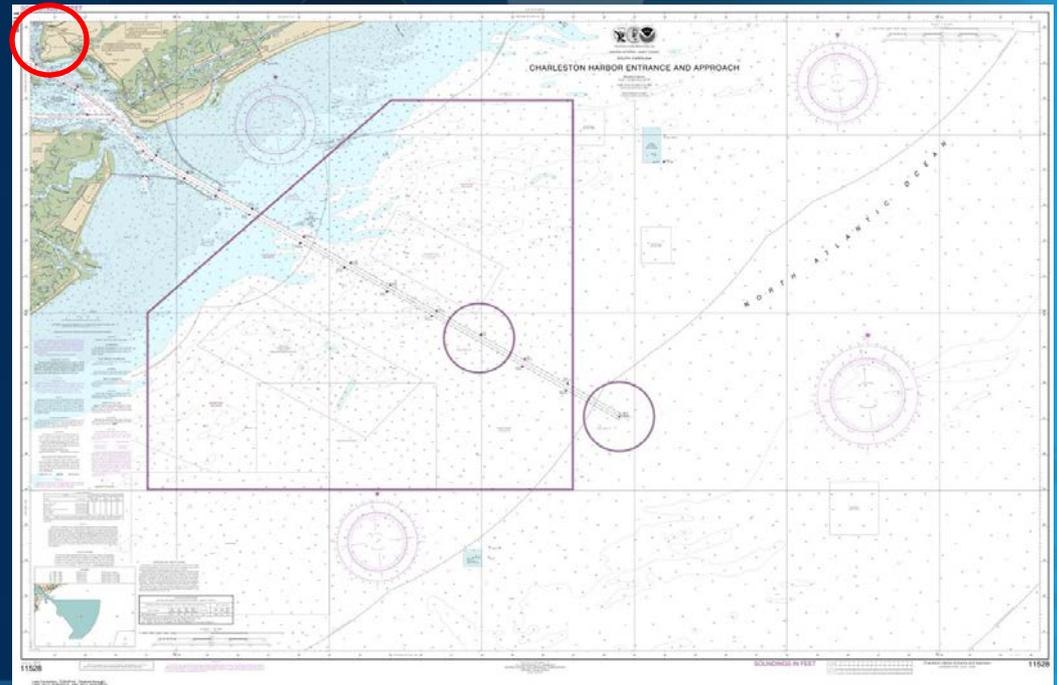
Future of Coastal Intelligence

- Collect once, use many times
- Crowdsourcing
- Diverse platforms that integrate new and existing technologies



Future of Coastal Intelligence

- Geographically tailored
- Coordination & integration of products
- Improve data access, management, and interoperability
- Industry opportunities



What Can the HSRP Do?

- **Advise NOAA on strategic issues:**
 - Where's the science going?
 - What cutting edge technology should NOAA explore?
 - What opportunities might exist for new business models (e.g. PORTS)?
 - Are there opportunities for new partnerships?
 - What coastal issues should NOAA be tackling? How?
- **Advise NOAA on regional, national stakeholder needs:**
 - Where are the gaps in NOAA's products and services?
 - What stakeholder needs are not being met?
 - Are there better ways to meet stakeholder needs?
 - How can NOAA better connect to and strengthen relationships with its stakeholders?

