

## Marine Board

NOAA's National Ocean Service Lorraine Robidoux

October 30, 2014



## **NOS Roadmap: Outcomes**

Coastal Resilience Coastal Intelligence

Place-based Conservation

Better capacity to respond

Integrated support tools for port communities

More protection for special places

Improved community preparedness and response

Regional prediction of total water inundation

Better management for special places

Natural-based infrastructure utilized in coastal communities

Early warnings for ecological hazards



## **NOS Roadmap: Outcomes**

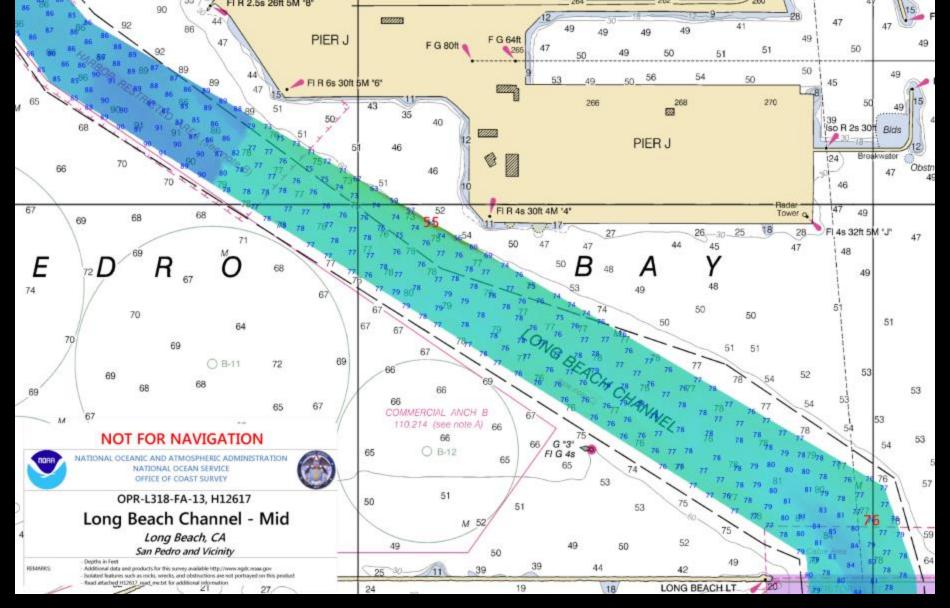
#### OUTCOME

CI1 Meet the need for expanded commerce in busy ports through enhanced and integrated decision support tools.

#### STRATEGY [Lead: OCS, IOOS]

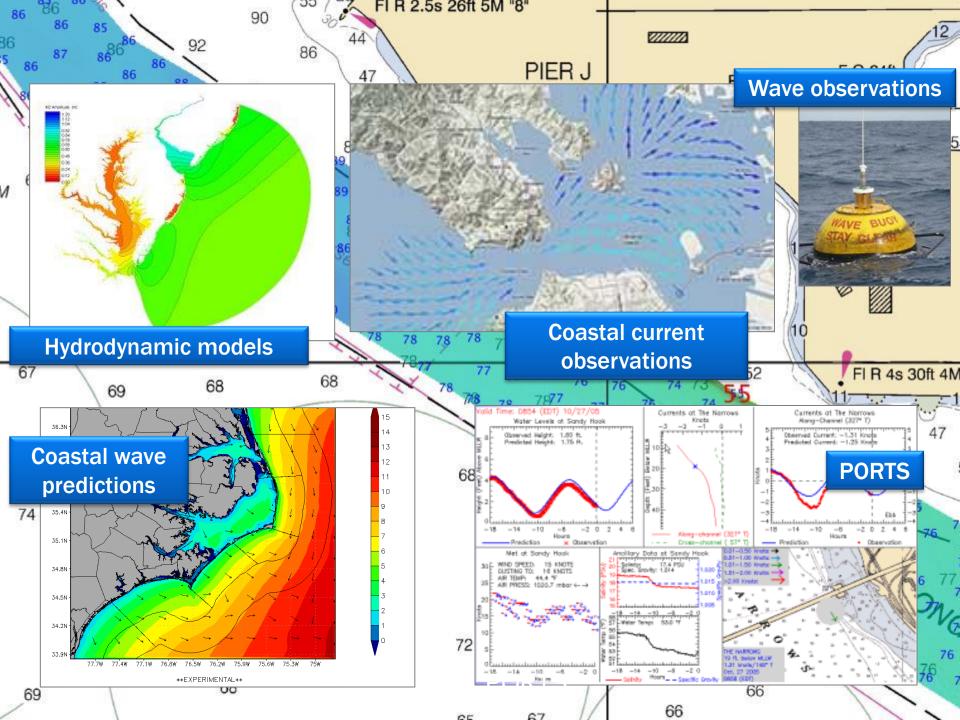
**CI1.1** Maximize access to highly trafficked and increasingly space-constrained ports by providing ship managers with up-to-the minute information to maintain reliable safety margins.

ACTIONS	TIMELINE	NOS PROGRAMS
CI1.1.1 LA/LB. Focus initially on the port of Los Angeles/Long Beach to better understand the decisions that mariners are trying to make (such as managing underkeel clearance), how they are currently accessing NOAA navigation and positioning information, and if it meets their needs. Use the information gathered to define "deliverable(s)."	FY14-15	Lead: OCS, IOOS Support: CO-OPS, NGS, OCM.
CI1.1.2 Integrate NOAA data. Explore with partners, including private sector service providers, better ways to deliver integrated NOAA navigation and positioning data to user systems of choice.	FY14-15	Lead: OCS Support: CO-OPS, NGS, IOOS, OCM
CI1.1.3 Develop integrated product. Develop (or co-develop) integrated products or new data delivery method(s) that meet customer requirements.	FY15	Lead: OCS Support: CO-OPS, NGS, IOOS, OCM
CI1.1.4 Evaluate product. Provide training to users, solicit feedback on satisfaction of use for the purpose intended, and improve products as needed. Consider repeating the process in other ports positioning themselves for post-Panamax expansion.	FY15-16	Lead: OCS Support: CO-OPS, NGS, IOOS, OCM



## **Precision navigation developments**





# Decision support for precision navigation integrated for place, time, and vessel

- Charts
- High resolution bathymetry
- Safety contours
- Air Draft
- Tides & water levels
- Currents
- Winds
- Wave heights
- Weather



