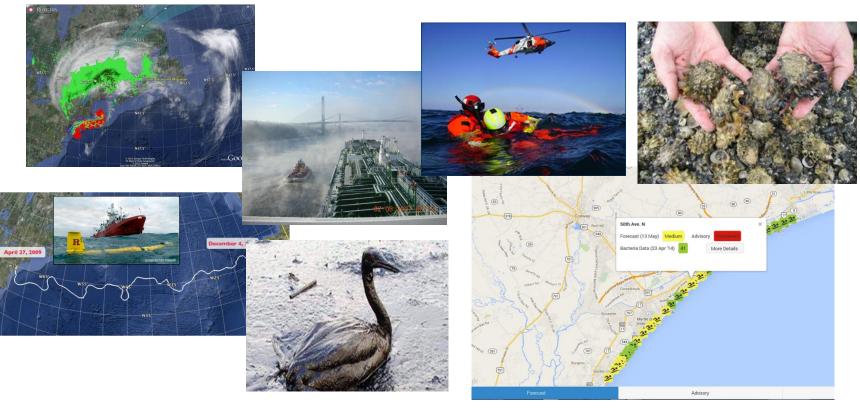
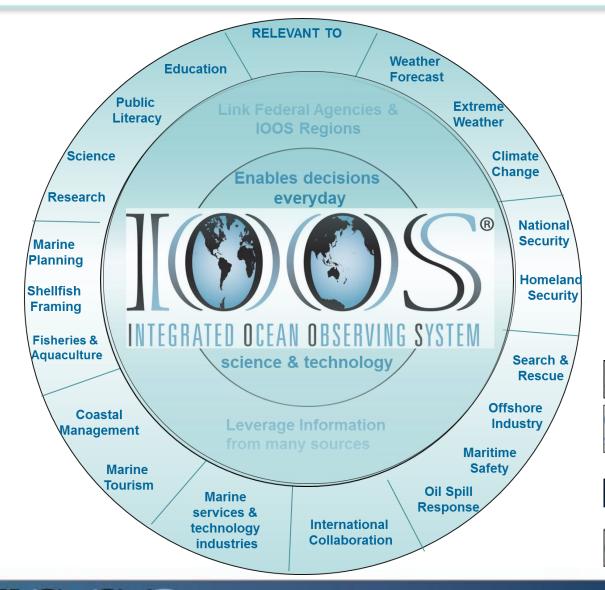
U.S. Integrated Ocean Observing System (IOOS[®])



Zdenka Willis, Director, U.S. IOOS Program May 14, 2014



IOOS at Work!



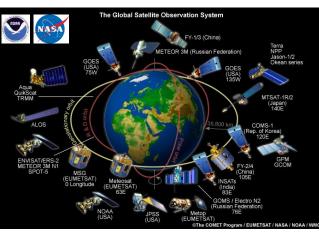
Federal Component:

Operated By:



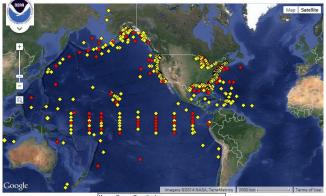


IOOS - National Backbone



Satellites

607: Buoys, Water Level Gauges, Coastal and Estuary stations



Stations with recent data
 Stations with historical data only
 Stations with no data in last 8 hours

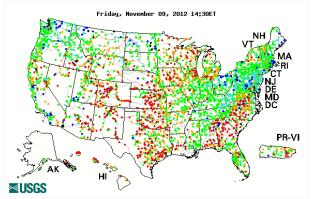
Cursor Coordinates: 607 NDBC Meteorological/Ocean,NERRS,NOS /CO-OPS,TAO,Tsunami stations deployed 505 have reported in the past 8 hours

Disclaimer

Get Observations I



PORTS®



Stream Gauges



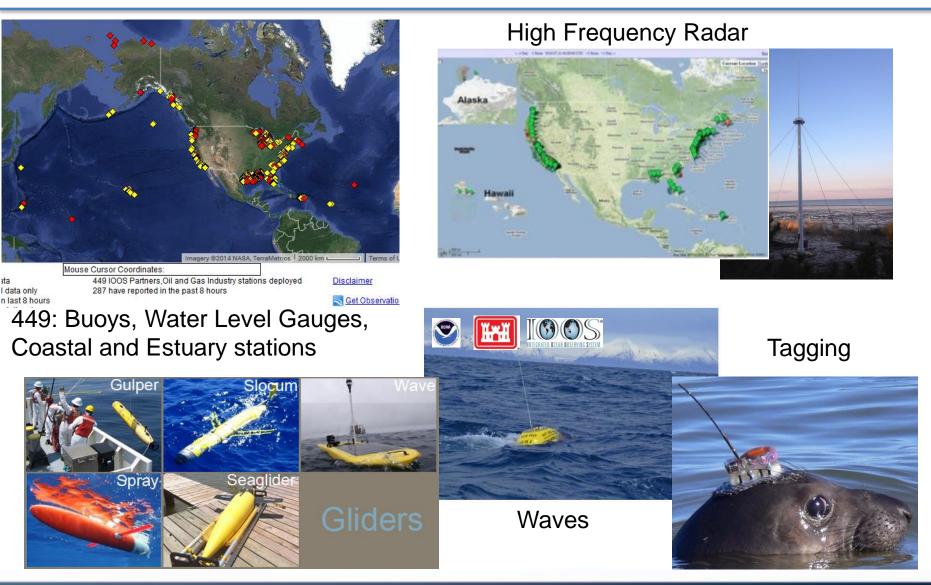
Water Quality



Research Infrastructure

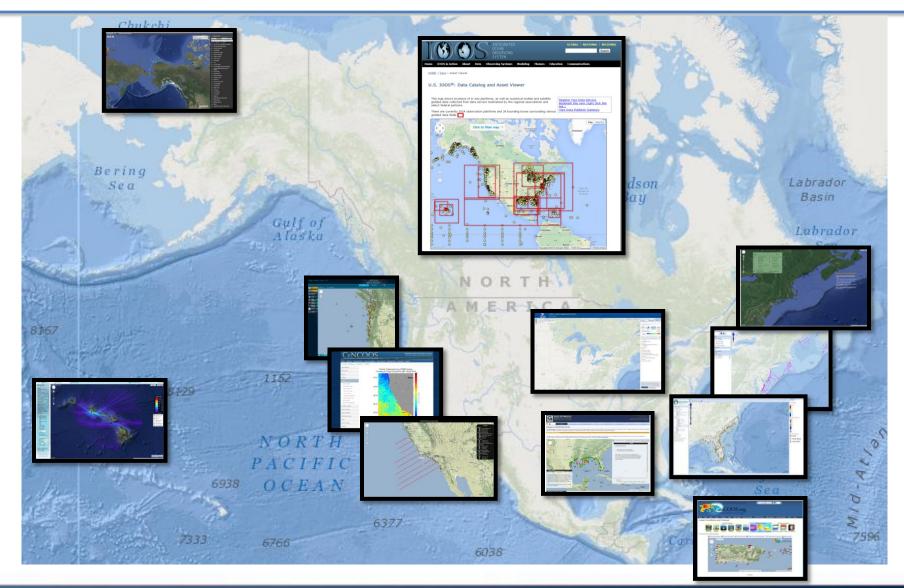


IOOS – Regional Component





Exposing Data!





Bravo Zulu: SECOORA Contributing to the U.S. IOOS

- HF radar data accessible through the NWS Advanced Weather Interactive Processing System (AWIPS)
- 2013 Gliderpalooza participant
- Beach water quality EPA partnership
- Regional Ocean Partnership supporting the GSAA
- Leading the effort to connect regional IOOS with NOAA's Ecological Forecast Roadmap
- Supporting Navy's Atlantic Fleet Hurricane Exercise in collaborating with MARACOOS
- DMAC: Vocabulary work; archive pilot, Eye on the Earth



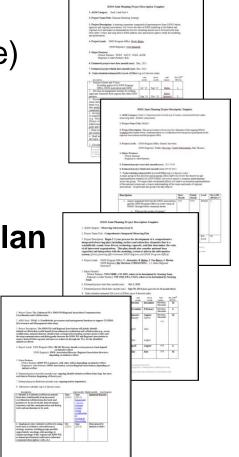
It's Been a Busy Year!

- National Glider Plan
- National Modeling Strategy
- Adoption of IOOS Sensor Observation Service
- HF Radar data available to NCEP and NWS AWIPS (Fall 2014)
- Marine Sensor Innovation Program
- Marine Bon
- QARTOD Manuals Published
- Animal Telemetry Network
- Certification
- GEO Endorsed



Joint Planning – Focus Areas

- 1. National Modeling Strategy (Becky, Josie)
- 2. DMAC (Derrick, Julie)
- **3. Comprehensive Integrated Observing Plan** (Ru, Charly)
- 4. 3 Cs: Communications, Coordination, Collaboration (Molly M)





Doing Business - How Can We Improve

•Always looking at how to improve the partnership through better cooperation and communication

- Reviewing feedback from the IOOS Association
- Discussion with the Program Office staff
- Examining options bound by federal requirements
- Upcoming Key Dates:
 - Summer/Fall 2014 Drafting the next regional funding announcement
 - January 2015 Publish next regional funding opportunity (June 2016 starts)
 - July 2015 Regional proposals due for FY2016 awards
 - June 1, 2016 new award starts



Marine Technology and Services Industry Study











- Marine technology & services industry is an important partner and stakeholder
- First step toward assessing the economic impact of the marine ocean technology sector in the U.S.
- Collection and analysis of both qualitative (interviews)
 & quantitative data (statistics).



Welcome to the US IOOS[®] Impact Study of the Marine Technology Sector

ANY PROVIDE TECHNOLOGY TO THE US 1005 OR HAVE A PRODUCT THAT DATA? WE WOULD LIKE TO HEAR FROM YOU.

ed Ocean Observing System (1005, <u>www.isos.gov</u>) has awarded <u>ERISS</u> nds to work with <u>The Maritime Alliance</u> on a study that will articulate the of the ocean observation sector in the U.S. This nationally-focused study will es classified as providers of technology to US 1005 and intermediate users of US that sell it to end users. The study will address items such as: number of category (provider and intermediate user), size of these companies, volume of f exports, and number of employees. The study will include narratives by US 100S has helped their operations, planning, and growth, as well as perceived a growth and investment. The study began September 2013.

nised of 17 federal agencies, 11 regional associations (RAs), and a technology lidation organization (the Alliance for Coastal Technologies (ACT). Additional large and growing number of organizations including industry, academia, state, werments, and other federal and non-federal organizations.

Click HERE to tell us about your experiences with the IOOS or to opt in to the study.

Your participation is critical in order to assess the impact of this valuable system.

For further information on this study, please contact The Maritime Alliance Executive Director Bill Riedy at <u>briedy(DTheMaritimeAlliance.org</u> / (619) 450-4600 x182 or the President Michael Jones at mbjones(DTheMaritimeAlliance.org / x142.

http://www.usworks.com/usioos/



Where are the Companies?





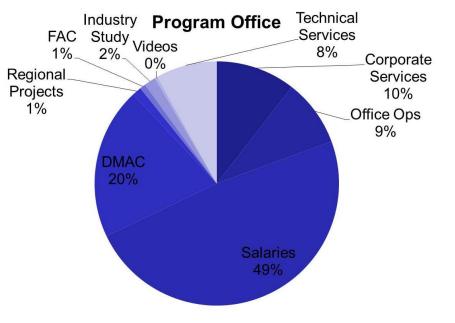
IOOS Budget

FY 14 Request	FY10	FY11	FY 12	FY 13 CR	FY 14	FY 15 Pres Bud
Regional IOOS Total	\$27 ¹ m	\$21.95 ¹ m	\$23 m	\$ 28/26 m	\$28.5	\$29.5m
Competitive funding for the national network of regional systems	\$20m	\$20m	\$17m	\$18.4m	\$19.3m	19.3m
Real Time Surface Current Mapping	included in Reg line	included in Reg line	\$5m	\$5m	\$5m	\$5m
 Marine Sensor Innovation Project: Modeling Testbed (COMT) Sensor Verification (ACT) Advanced Sensors 			<u>\$1³m</u> \$0 \$1m \$0m	<u>\$2.9m</u> \$1m \$1m \$904K	<u>\$4.2m</u> \$1.05m \$1.05m \$2.1m	\$5.2m
Modeling Test Bed (COMT) & Sensor Verification(ACT);	\$7⁴m	\$1.95m				
National IOOS Total	\$6.5m	\$6.5m	\$6.4m	\$ <mark>6.5/5.9</mark> m	\$6.5m	\$6.5m
Total U.S. IOOS	\$33.5m	\$28.4m	\$29.4m	\$31.9m	\$35m	\$36m



Program Office Activities

- Represent Internationally, Nationally
 - USGEO, GOOS
 - IOOC, IWG-OP; Biodiversity, Modeling Strategy
- NOAA
 - Ecological Roadmap, Storm Surge Road Map, Coastal Storms Program, UxS roadmap, NOAA councils, NWS and NMFS engagement, Ocean Acidification
 - Support National Ocean Service Roadmap
- Regional Needs
- Certification
- Future year budgeting; annual budgeting execution
- DMAC Architect
- Administration of Federal Advisory Committee
- Brief on the Hill
- GAO Audit
- Mandated Congressional Reports
 - Bi annual, Independent Cost Estimate
- 30-40 taskers per month daily grind



Personnel Changes

- Decreased to 2 Divisions
- Deputy promoted to Director NOAA lab
- Carl Gouldman promoted to Deputy
 - Will recruit Division Chief
- OPS Division Chief on Detail
 - Derrick Snowden Acting Div Chief
- 2 Individuals departed OPS



IOOS Placement in new NOS Budget Structure

NATIONAL OCEAN SERVICE Operations, Research and Facilities (\$ in Thousands)	FY 2014 President's Budget	FY14
Navigation, Observations & Positioning		
Navigation, Observations & Positioning	145,852	136,000
Hydrographic Survey Priorities/Contracts	26,946	25,000
IOOS Regional Observations	34,520	28,500

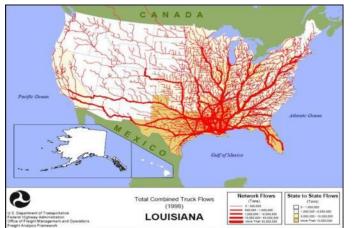
- 4 Offices combined
 - National Geodetic Survey
 - Center for Operational Oceanographic Products and Services
 - Office of Coast Survey
 - IOOS
- Important to build on strong relationships
- Opportunity to extend & strengthen Regional IOOS



NOS Cross-cutting Priorities

- Improve end-to-end coastal preparedness response, recovery and resiliency
- Coastal Intelligence
- Enhance coastal and marine resource conservation through place-based management











Coastal Roundtable

Dr. Bamford leading effort to better connect NOS Programs with partners

Monthly dialogue with:

- > IOOS Association
- Coastal States Organization
- National Estuarine Research Reserve Association











Coastal communities represent an incredible resource in jobs, people trade and recreation. Coastal areas provide us a place to create livelihoods, but these communities depend on healthy oceans and coasts. With economic growth and environmental change, coastal communities across America will face significant and long-lasting challenges in the future. It is time that we, as a nation, re-envision our relationship with our coasts.

Like any smart investor, it is in our best interest to do what we can to protect our coastal and occean assets and use them wisely. But good decisions don't just happen. It takes hard work, foresigfit, good data and good science to keep our waters clean, make a community flood resistant, help coastal economies thrive, and make smart pre-and post-storm development decisions.

Storms like Sandy, as well as coastal flooding, inundation and erosion, and other disasters make everyone more aware of the urgent need for increased community resilience. A more resilient coast today will suffer less economic and societal damage from extreme weather and environmental events tomorrow.

In 2011, 45 percent of our nation's GDP valued at S66 trillion; was generated in coastal and Great Lakes counties, supporting approximately 51 million jobs and \$2.8 trillion in wages. Close to three million jobs directly depend on the resources of the oceans and Great Lakes. If the nation's coastal watershed counties were an individual country, they would rank third in GDP globally behind the U.S. as a whole and China.

What is resilience? The ability of people, businesses, communities, and ecosystems to better withstand and bounce back after a severe event.



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