

Josie Quintrell IOOS FAC Meeting November 2015



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## **IOOS** Association

Non-profit organization dedicated to improving nation's coastal observing system to deliver ocean, coastal and Great Lakes information relevant to decision-makers



- 11 RA are members
  - Each select 2 members, 1 vote
- Objectives:
  - Advocacy
  - Common Issues
  - IOOS federal/non-federal partnership

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- Administration
- Congress
- National Partners
- Emerging Issues

## Around the regions...



#### CariCOOS



MARACOOS



CeNCOOS

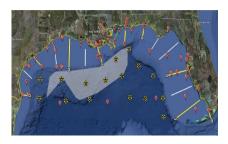


GLOS

NANOOS

NERACOOS

GCOOS



PaclOOS





SCCOOS





#### SECOORA



NERACOUS



IOOS | EYES ON THE OCEAN



## **RA Certification**

PaclOOS certified GLOS submitted All RAs Planning to submit this year Opportunity to engage federal

agencies



#### Side-by-Side Comparison of ICOOS Act of 2009, HR 2744 and S 1886

Title/Section	ICOOS Act of 2009	HR 2744	S 1886		
Short Title	Integrated Coastal and Ocean Observing System Act of 2009	No change	Coordinated Ocean Monitoring and Research Act		
Definitions	Creates RICEs	No change	Changed to Regional Coastal Observing Systems		
Lead Federal Agency	NOAA established as Lead and it's responsibilities for developing policies and protocols, certification guidelines, oversee contracts, periodic reviews, DMAC, etc.	No change	*Deletes public education on climate change *Adds product development for weather forecasting, SAR, corrosive seawater forecasts, water quality forecasts, and HAB forecasts		
System Advisory Committee	Reports to the IOOC and NOAA Administrator	No change	Reports to the Council and the NOAA Administrator		
System Advisory Committee	No provision for staggered terms	Allows for staggered terms	Allows for staggered terms – different language		
System Advisory Committee	Purpose is to provide advise on administration and operation of the program, expansion of the system, end user communities and other purposes identified by NOAA or the IOOC	No change	<ul> <li>* National surface current mapping</li> <li>* Fleet acquisition strategy for AUVs</li> <li>* Survey program for biological, chemistry, geology, physics and hydrology</li> <li>* New analytical methods for data assimilation</li> <li>* Integrated sediment monitoring</li> <li>* Multi-region marine sound monitoring</li> </ul>		
Interagency Financing	Allows for interagency financing	Clarifies language	Clarifies language to address NOAA's concerns		
Reports to Congress	Requires reports every 2 years	No change	Changes to 3 years after the initial 2 years, adds gaps in the surface current mapping, coastal buoys, and ocean chemistry monitoring		
Authorization of Appropriations	Such sums as necessary	\$36,151,000 FY15 to FY19	Such sums as necessary		
Reports and Research Plans			<ul> <li>Amends Federal Ocean Acidification Research and Monitoring Act of 2009 by adding:</li> <li>1) Economic vulnerability report</li> <li>2) Monitoring prioritization plan</li> <li>3) Strategic research plan</li> <li>4) OA program expanded to included research to understand the combined effects of changes in ocean chemistry and applied research to identify adaption strategies.</li> <li>5) Stakeholder input mechanism</li> <li>6) Directs NSF to support merit-based, peer-reviewed OA research</li> </ul>		



#### **Congressional Briefings**



House Ocean Caucus Briefing: Feb 2015

Capt. Dave Gelinas, Pen Bay Pilots Dr. Scott Glenn, Rutgers and MARACOOS

Dr. Russell Calendar, Moderator, NOAA NOS

Dr. Kris Lynch – Shell Oil Mr. Andrew Reich - Florida DEP



Senate Ocean Caucus Briefing: July 2015 Ms. Sam Helton, Sen Wicker Mr. Brandon Elsner, Sen Wicker Capt Kip Louttit - Marine Exchange of Southern California Dr. Micheal Macrander, Shell Artic Program VADM Manson Brown, Ass't Secretary of Commerce for Environmental Observations and Predictions Molly McCammon, Moderator



### Senate Reauthorization: S 1886





## **Oceans, Atmosphere, Fisheries and**

**Coast Guard** Rubio – Chair

Wicker (MS) Cruz (TX) Sullivan (AK) Johnson (WI)

Booker (NJ), Cantwell (WA) Ayotte (NH) Blumenthal (CT) Schatz (HI) Peters (MI)



Co Sponsors – To date Sullivan R-AK Murkowski R-AK

Going to Mark Up Soon



## House Reauthorization Bill: HR 2744



Natural Resources Committee, Subcommittee on Water, Power and Oceans 25 Co-Sponsors – 14 D, 10R, 11

Rep Young -Lead



Sablan – Lead

Guinta R-NH1 Sablan R-MPO Crenshaw R-FL4 Amata R-AS0 Clawson R-FL19 Jones R- NC3 Kilmer D- WA6 Larsen D-WA2 Lowenthal D- CA47 Honda D-CA17 Peters D- CA 52

Pierluisi D-PR0 Rooney R-FL 17 Rouzer R-NC 7 Thompson D-CA5 Bordolla D-GU0 Huffman D-CA2 Jolly R-FL13 Takai D-HI1 Rohrabacher R-CA48



Davis D-CA53 Herrer Beutler R-WA3 Bonamici D-OR10 Heck D-WA10 Pingree D-ME1



## Challenge

" <u>Investing in key observational platforms sustains the vital</u> <u>environmental intelligence our citizens and businesses rely upon</u>." Dr Kathy Sullivan, NOAA Administrator 8/24/15





# Appropriations

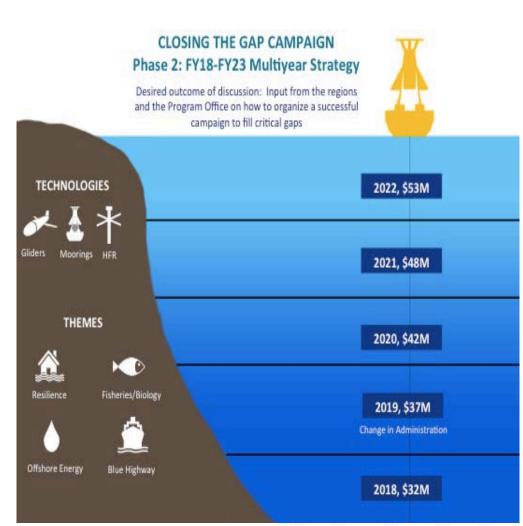


IOOS Appropriations	FY10 Enacted	FY11 Spend Plan	FY 12 Spend Plan	FY 13 Spend Plan	FY 14 Enacted	FY 15 Enacted	FY 16 House	FY 16 Senate
Regional IOOS Total	\$27m	\$21.9m	\$23 m	\$26.5m	\$28.5m	\$29.5m	\$29.5m	\$29.5m
Competitive funding for the national network of regional systems, including surface currents	\$20m	\$20m	\$22m	\$23.5m	\$24.3m	\$24.5 m		
Marine Sensor Innovation Grants, Modeling Test bed, Sensor Verification	.\$7m	\$1.9m	\$1m	\$3m	\$4.2m	\$5 m		
U.S. IOOS Program Office*	\$6.5m	\$6.5m	\$6.4m	\$5.9m	\$6.6m	\$6.6m	\$6.6m	\$6.6m
Total U.S. IOOS	\$33.5m	\$28.4m	\$29.4m	\$32.4m	\$35.1m	\$36.1m	\$36.1 m	\$36.1 m

# **Closing the Gaps**



- Scalable campaign
- Tangible outcomes
- Align with Administration Priorities
- Initial focus
  - Water levels
  - Precision navigation
  - HAB forecasting
- Defining IOOS niche Federal/Nonfederal partnership



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## **Beyond NOAA**

BOEM/BESSE -

Data sharing, regional portals Atlantic – conventional and renewables

National Fish and Wildlife Foundation

Permit and monitoring requirements – Discharge permits, facilities, etc.

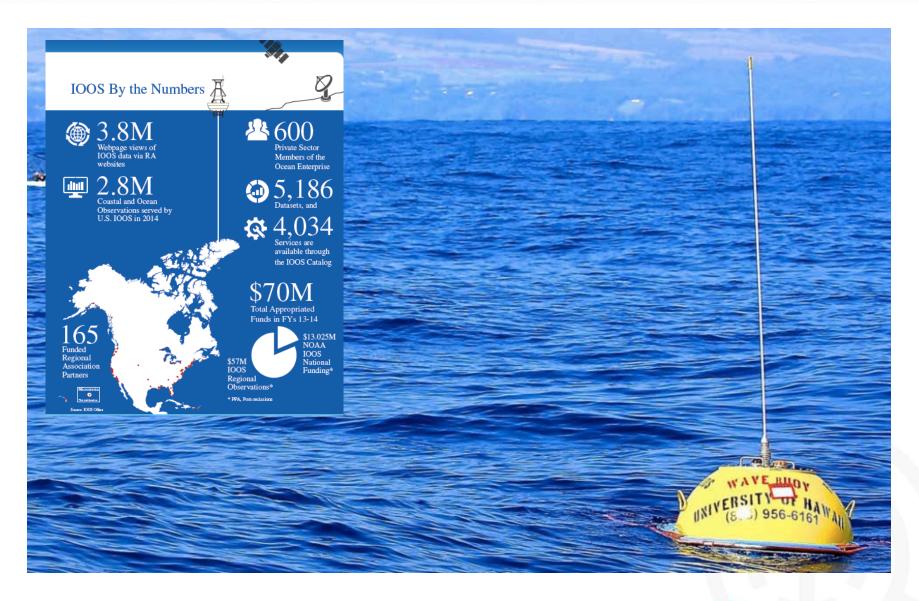


### **Honorary Directors**

Admiral Gaffney, Mary Glackin, Norm Dicks and Admiral Lautenbacher (ex officio)

- Transition white paper
- Identify strategic partners
- Champions for the IOOS enterprise
- Diversify membership

#### Messaging: IOOS by the Number





# Thank you





## Thank you

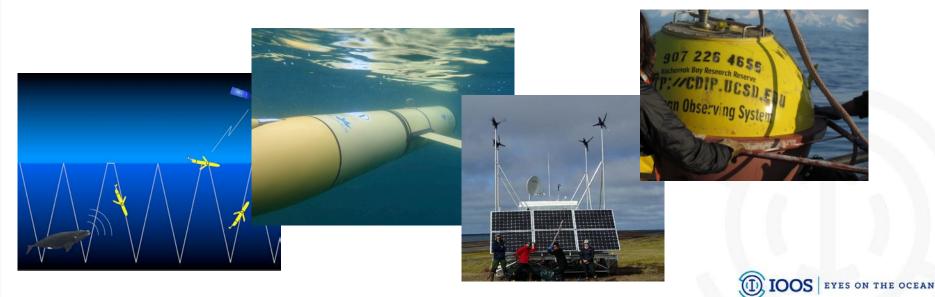
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## Next Steps



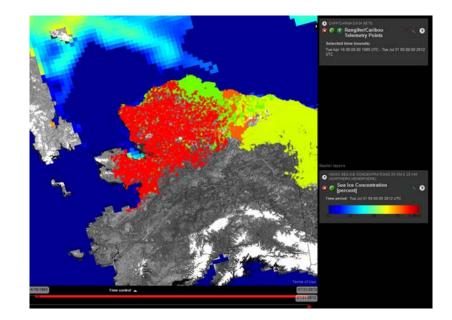
## **AOOS Observing Assets**

- Chukchi Mooring (UAF, Conoco-Phillips, Shell, Ogloonik-Fairweather, AOOS, NPRB)
- HF Radar (UAF, BOEM, AOOS) Point Lay, Wainwright, Point Barrow, Cape Simpson
- Autonomous Glider (UAF, UW, Rutgers, AOOS)
- Wave buoys
- AIS/weather



## **AOOS Arctic Portal**

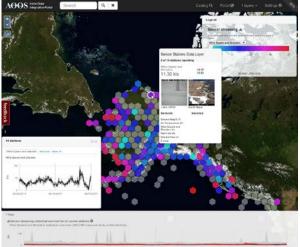
- Polar projection
- Handles many data types
  - GIS/project type data
  - Satellite imagery
  - Real-time sensors
  - Forecast models
  - Infrastructure & Transit
  - Habitat & Sensitivity
- Visualize data stacks
- Explore by time
- Data downloads







## **Power of the Data Portal**



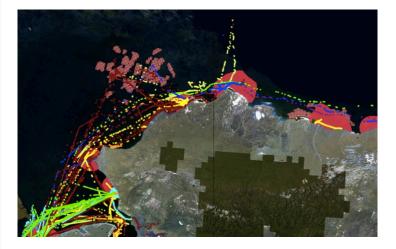
Real-Time Sensors



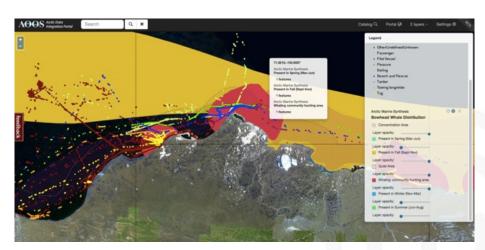
Shell Sea Ice Map



Traditional Knowledge



Vessel tracks (Alaska Marine Exchange), community use areas (Arctic Marine Synthesis), and offshore wells (BOEM)



Fall bowhead whale distribution (Arctic Marine Synthesis) with fall vessel traffic in 2012 (Alaska Marine Exchange)



## **Research Support**

- Research Asset Portal: What instruments are deployed and what are they collecting?
  - Assist planning
  - Reduce Duplication
  - Avoid collisions
  - Holistic picture
- Research Workspace



 Web-based data management system for assembling, storing, and sharing data between members of biological and physical oceanography communities





## **International Partnerships**

- Protection of the Marine Environment Working Group of the Arctic Council Norway, Russia, Canada, Iceland, US
- Pacific Arctic Group (PAG) Canada, China, Japan, Republic of Korea, Russia, US
- Distributed Biological Observatory (DBO) Canada, China, Japan, Republic of Korea, Russia, US
- Marine Arctic Ecosystem Study (MARES) Canada, US
- Canada Department of Fisheries and Oceans Canada, US
- Russian-American Long-term Census of the Arctic (RUSALCA) Russia, US
- Industry Arctic Data-sharing Agreement Shell, ConocoPhillips, Statoil



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## **Data Management & Products**

- Maintain AOOS website and data portal
- OCEAN DATA EXPLORER
- Real-time Sensor Map
- Model Explorer
- Research Assets Map
- Arctic Portal
- Industry Arctic Data
- Research Workspace
- Seabird Portal

