



Zdenka Willis

IOOS Program Director

December 4, 2014

Penobscot Bay  
Searsport, Maine







# Competitive Award & Certification

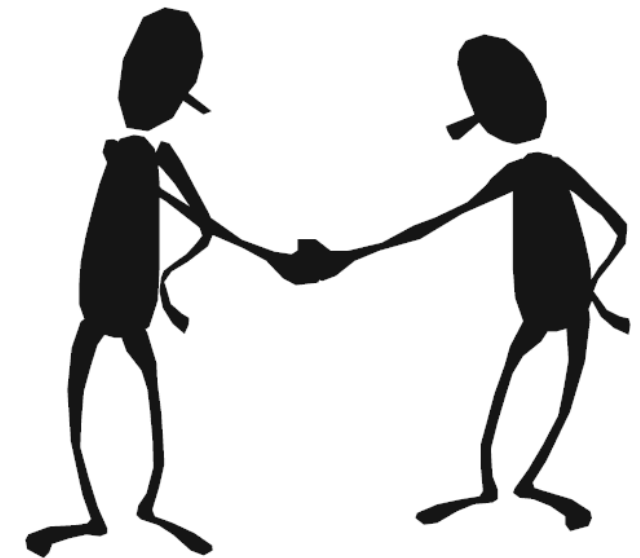


Open for Certification - July 2014

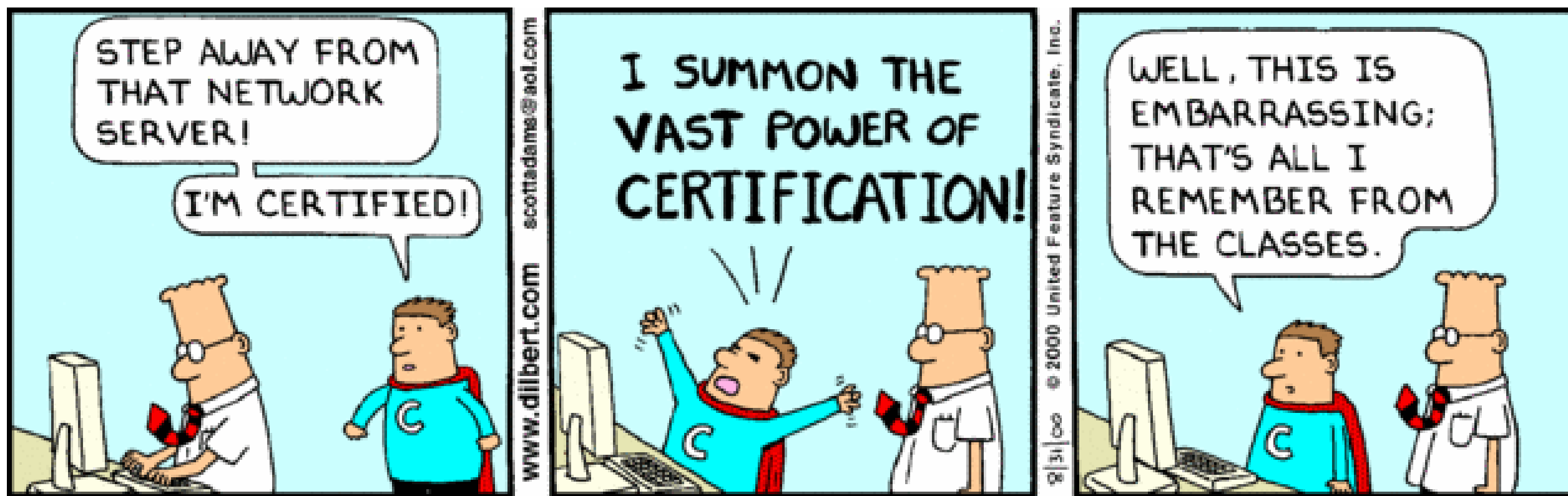
# FY2016 RA Federal Funding Opportunity

## Timeline:

- NOAA Approval - ~January 2015
- Publish Announcement – ~January 2015
- Proposal Close date – ~July 2015
- Merit Review – ~September 2015
- Forward Recommendations - ~March 2016
- Make Awards – 1 June 2016



# IOOS Certification



## Drivers:

- Certification is a requirement of ICOOS Act
- Provides formal recognition to regional partners
- Extends civil liability coverage for data use
- We believe it is a good thing

# Cut to the Chase - Five Key Points

1. Establishes minimum criteria for how a RICE operates
2.  $RICE = RA$
3. Civil liability applies to observation data
4. Certification is not connected to funding
5. Avoids being prescriptive when possible



# Approach

**Credible** – recognize NOAA's responsibility for ensuring data quality and assumption of liability risk

**Reasonable** – develop program guidelines in accordance with RA capabilities as supported by Program Office funding

1. A stand-alone process
2. Take advantage of existing documents & resources
3. Applicants will have to create some new documents



# US IOOS Program Office: DMAC Focus



Technical solutions



Implementation across the enterprise



Building community

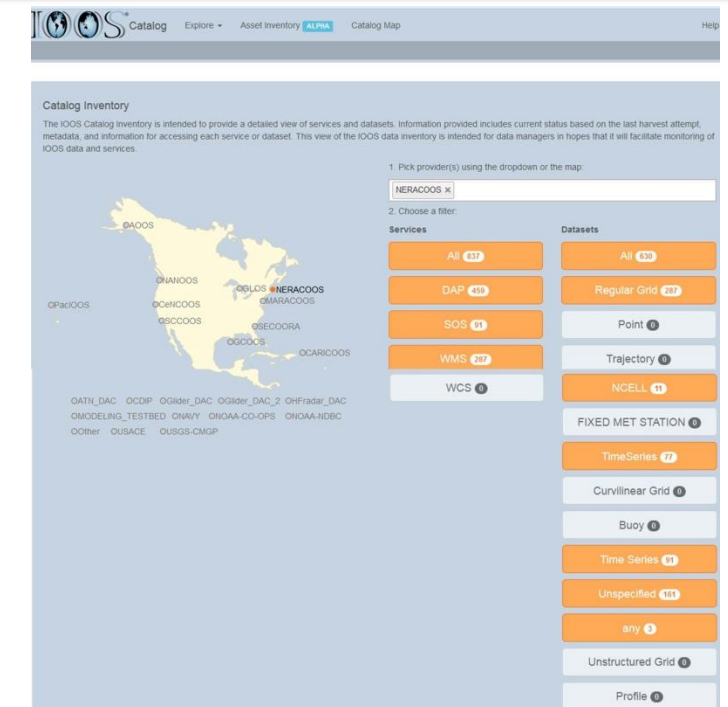
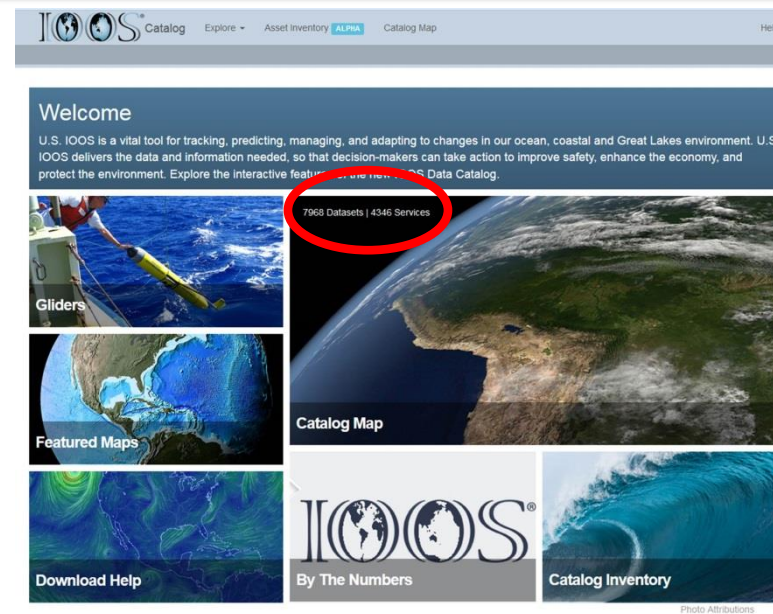
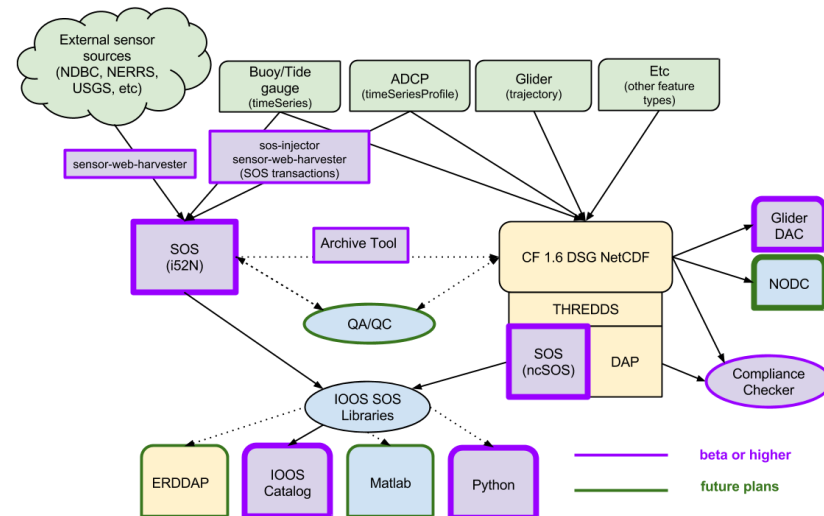
**Technology**

**Process**

**People**



# DMAC What's New

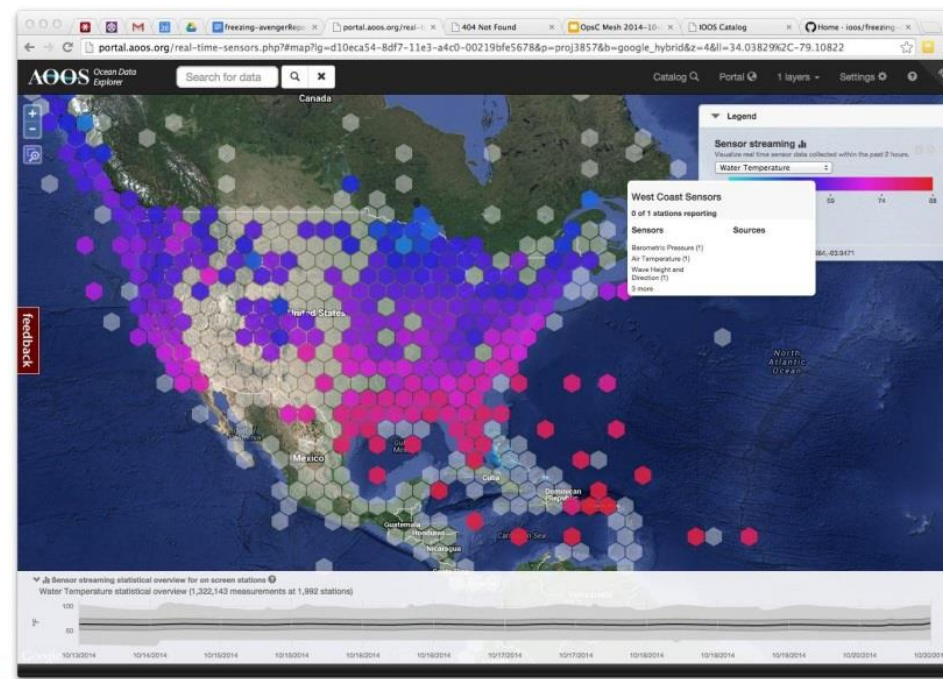
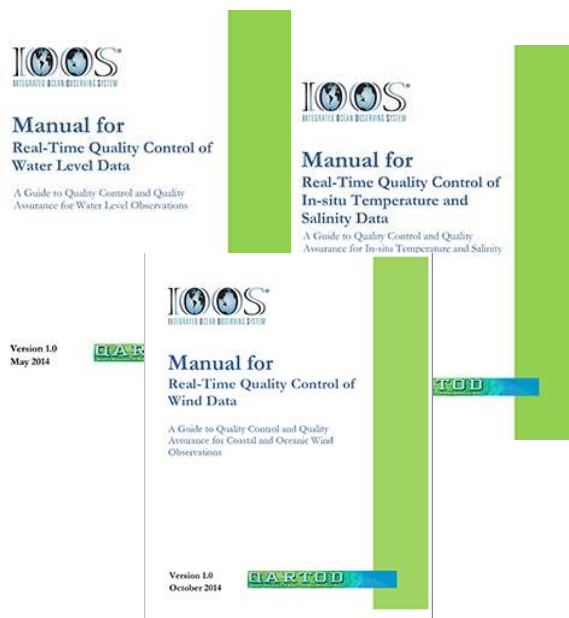


## SOCIAL MEDIA

NEWS:

<http://catalog.ioos.us>

<http://www.ioos.noaa.gov/catalog>



# Improving Access to Federal Biological Data

Collect

Publish/Preserve

Access Products



## DMAC-based process

Best Practices /  
Data Standards

- Metadata
- Terminology
- Web Services
- Tools

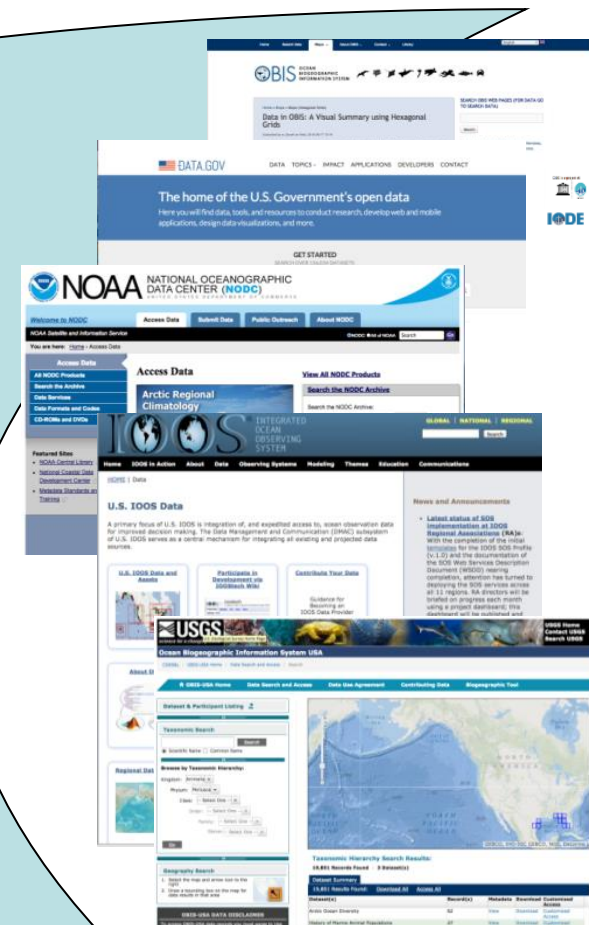
### Data Sources:

- Federal
- Academic
- State
- NGO

### Data Include - Species (or taxon)

- presence
- absence
- abundance

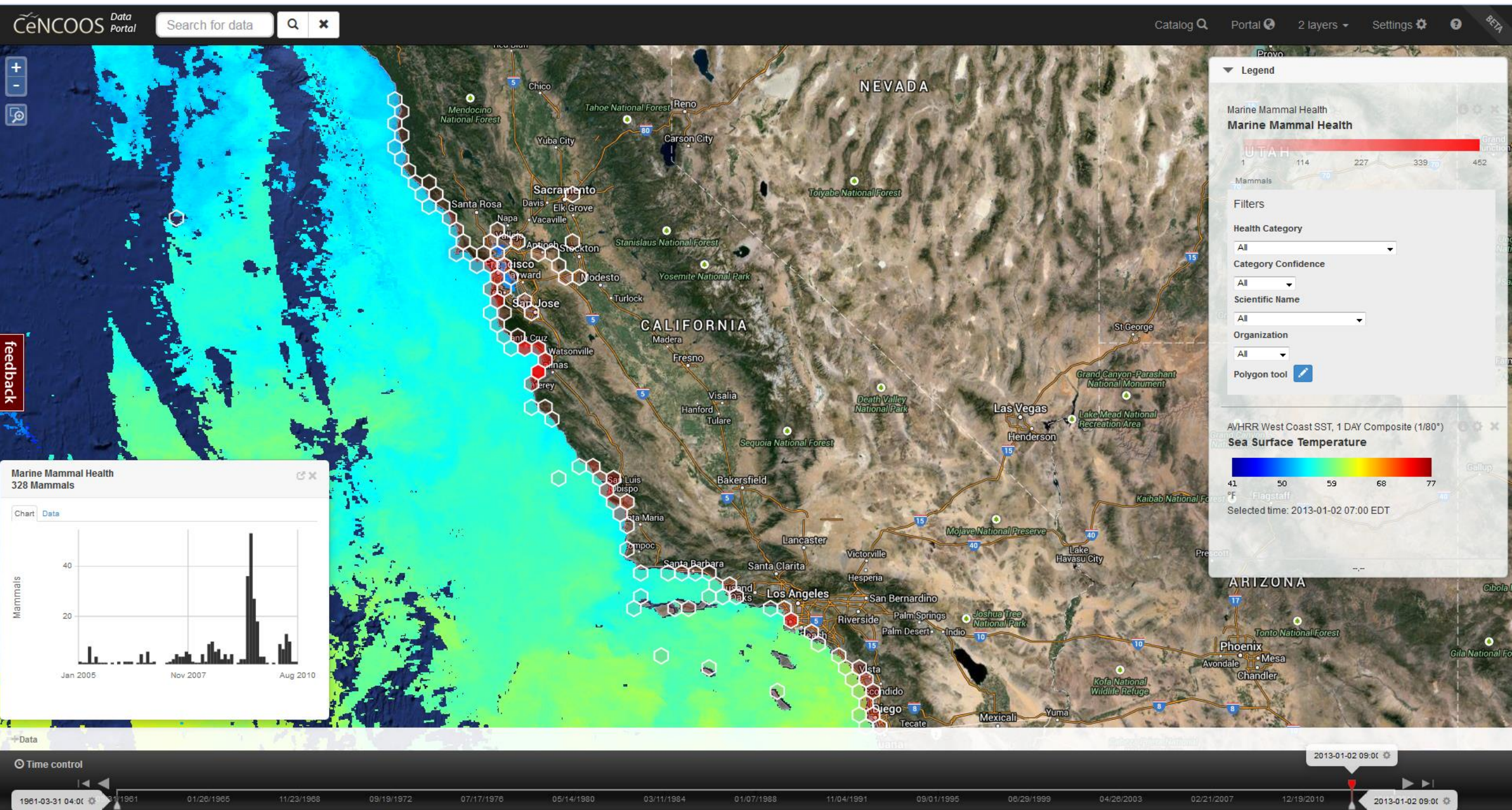
- Safe Ocean Operations
- Healthy Oceans
- Sustainable Use
- Hazard Protection
- Economic Support





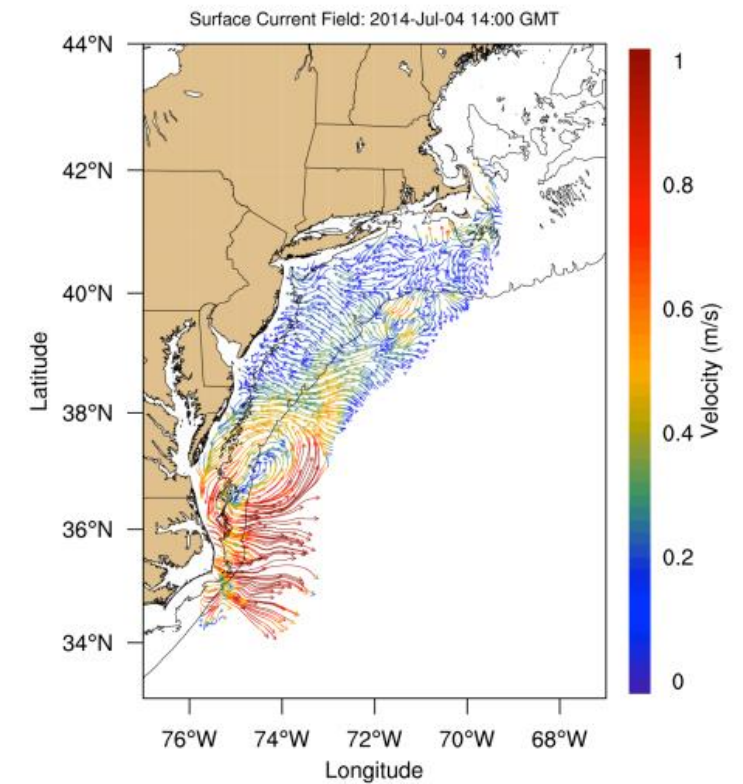
# Biological and Physical Data Integration

Emerging capability: Beta version of emerging marine mammal health mapping tool





# HF Radar Updates



# Glider - New

- Glider DAC 2.0
- Glider DAC review
- IOOC – Glider Task Team
- Deployments:
  - Gliderpalooza 2014
  - NOAA/AOML – Sandy Supplemental
  - NOAA/IOOS – GCOOS glider – Hypoxia
  - NOAA – Gliders pacific equatorial
  - And many others



Toward a U.S. IOOS® Underwater Glider  
Network Plan:  
Part of a comprehensive subsurface observing  
system

August 2014

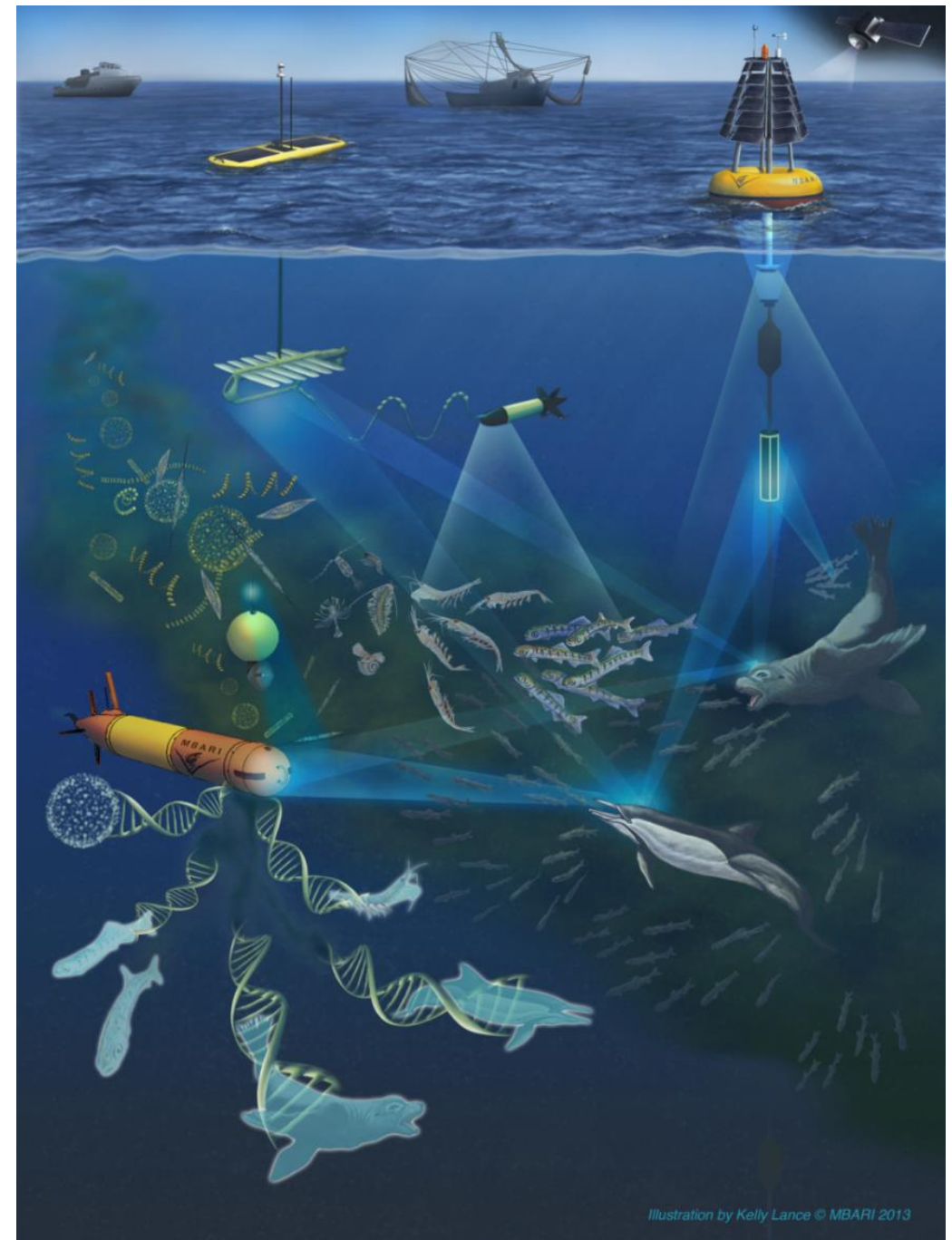


Glider tracks along the U.S. coast since 2002.



# Marine Biodiversity

- 3 Mbon projects to show how marine and coastal data could be integrated into the system
- This U.S. regional contribution to GEO BON is focused in four geographic areas: the Florida Keys, Monterey Bay, Channel Islands, and the U.S. Chukchi Sea continental shelf.
- <http://www.ioos.noaa.gov/biodiversity/welcome.html>



Credit: MBARI



# Is there an Ocean Enterprise?

## The Weather Enterprise

Public, Private, Non-Profit, Research

mia

Inf  
U.S Private Sector Weather Industry valued at \$3B/annum

ces, Infrastructure

ISSUES: Weather – Water – Climate

# The Ocean Enterprise

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Public, Private, Non-Profit, Research, Academia

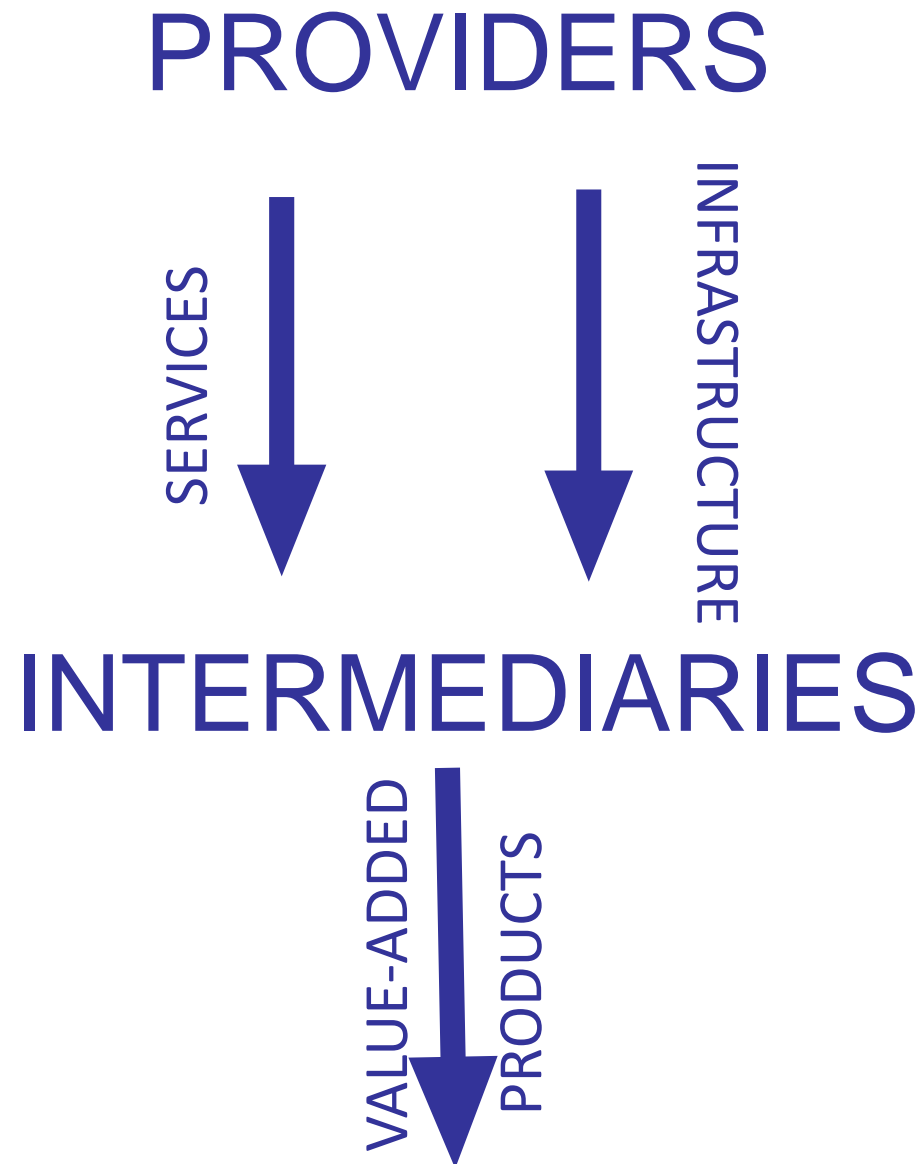


Information, Services, Infrastructure



**ISSUES: Oceans – Ecosystems – Climate**

# The Ocean Enterprise – Private Sector



ISSUES: Oceans – Ecosystems – Climate



# Ocean Enterprise Study of U.S. Businesses

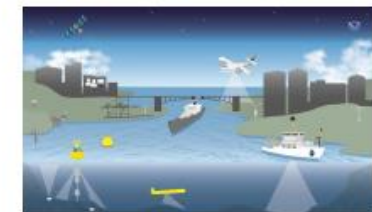
- >600 private sector firms
- Most companies < 10 employees
- 83% providers;  
9% intermediaries
- Input Needed:  
<http://www.usworks.com/usioos/>



**The Ocean Enterprise:**  
A study of US business activity in  
ocean measurement, observation  
and forecasting

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

## Year One Report



Prepared by

ERISS Corporation

The Maritime Alliance

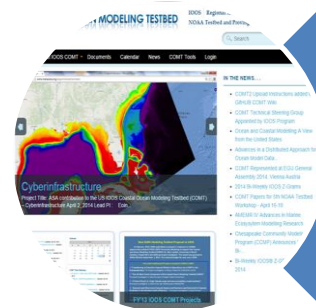
November 10, 2014



# Marine Sensor Innovation



## Sensor Evaluation



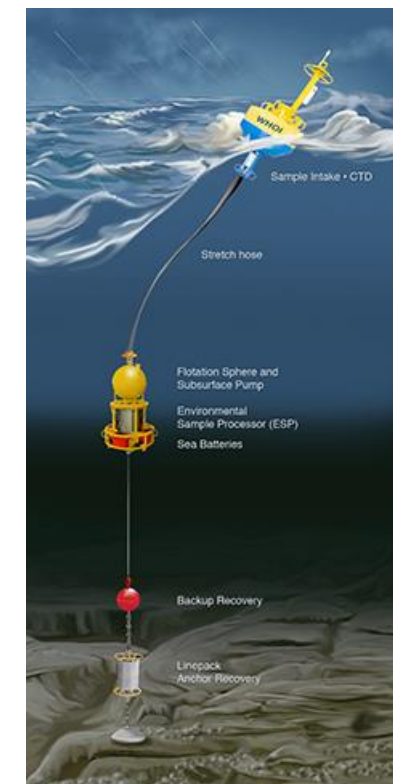
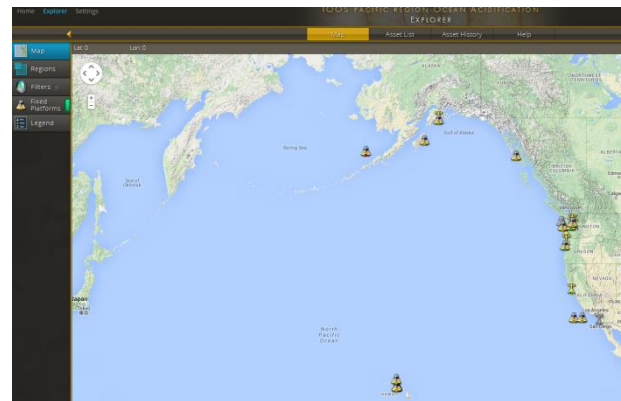
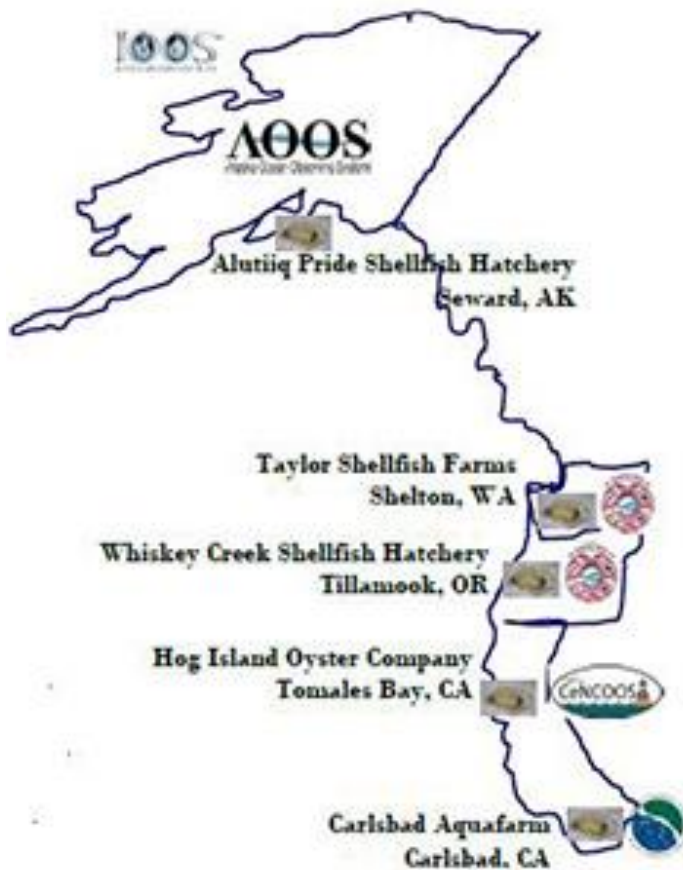
## Coastal Modeling Test bed



## Ocean Technology Transfer

# Ocean Technology Transfer – FY13

- West Coast Ocean Acidification
- Predicting Harmful Algal Blooms
- Accomplishments
  - Expanded Gulf of Maine ESPs
  - Enhanced Reaction & Filter Puck
  - Model Integration
  - Data Delivery thru NERACOOS





# Ocean Technology Transfer FY14

- NERACOOS; **Satlantic**: Transitioning State-of-the-Art Nutrient Sensing.
- NANOOS, UW, NOAA/NMFS/NWFSC; **Spyglass**: Operational Ecological Forecasting of Harmful Algal Blooms in the Pacific Northwest using an Environmental Sample Processor.
- CeNCOOS, UCSB; **McLain & Axiom**: Integration of the Imaging Flow CytoBot into a 40-year Time Series for San Francisco Bay
- AOOS, UAF; **Pacific Gyre**: Real-Time Sensor System for Detecting Freeze-up on Arctic Shelves
- NANOOS, AOOS, CeNCOOS, SCCOOS, PacIOOS, NOAA/PMEL; **Sunburst Sensors**: Improving an Ocean Acidification Observation System in Support of Pacific Coast Shellfish Growers – continuation of FY13 project

## Key Events



**Launch of Institute for  
Community Resiliency and  
Climate adaptation University  
of Connecticut Avery Point**

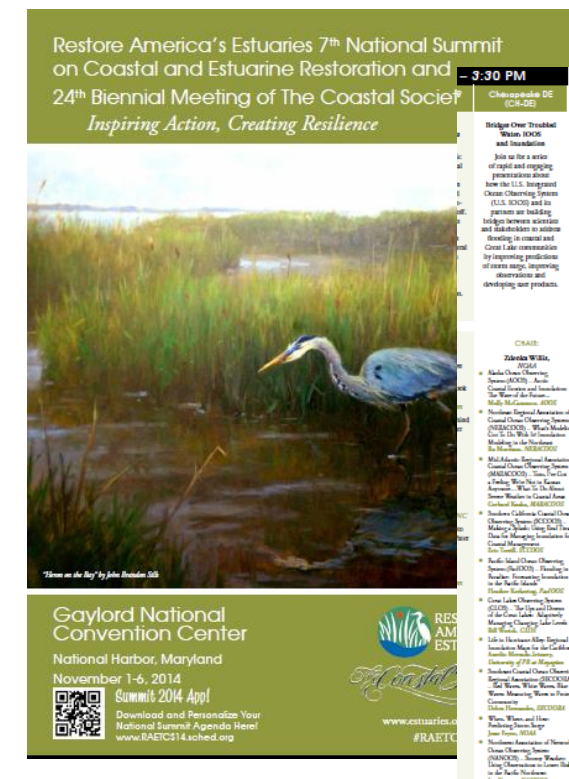
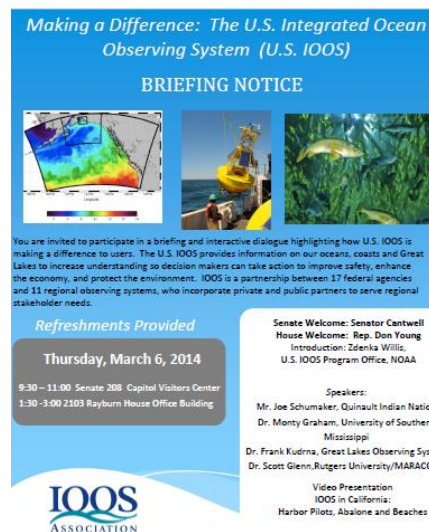
## GEO Unanimously Endorsed for Another 10 Years



# Northeastern Seaboard Workshop

## Hill Events (2)

# Hearing to Focus on New Ocean Technologies May 21, 2014



# IOOS IGNITE



# Communications

Web Site: [www.noaa.ioos.gov](http://www.noaa.ioos.gov)



<https://www.facebook.com/usioosgov>



@usioosgov – New this Year

USGEO exhibit storymap:

[http://www.ioos.noaa.gov/understanding\\_earth/index.html](http://www.ioos.noaa.gov/understanding_earth/index.html)



Video – 2 Videos



Press Release:

- Pacific Portal
- MBON
- MARES
- HF Radar into PORTS

# US IOOS at Work

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*Enables decision making*

*Fosters Advances in Science and Technology*

[www.noaa.ioos.gov](http://www.noaa.ioos.gov)



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