

# IOOS®: Our Eyes on the Oceans, Coasts and Great Lakes

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NOAA IOOS® Program

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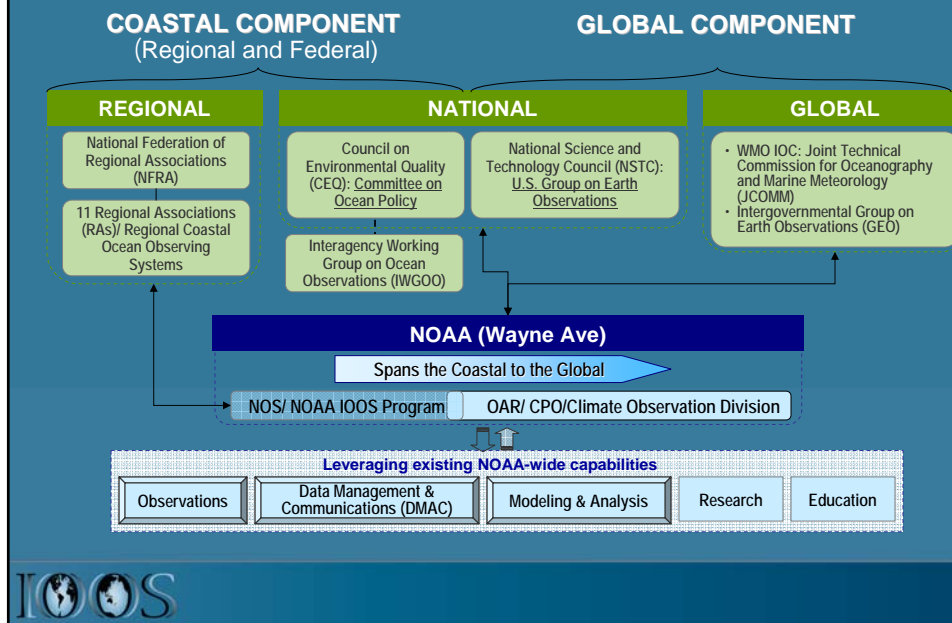


## Outline

- Status of IOOS development – particularly Interagency coordination
- IOOS in the NOAA budget
- Support for Regions
- Plans involving climate change and ocean energy



# What is IOOS®?

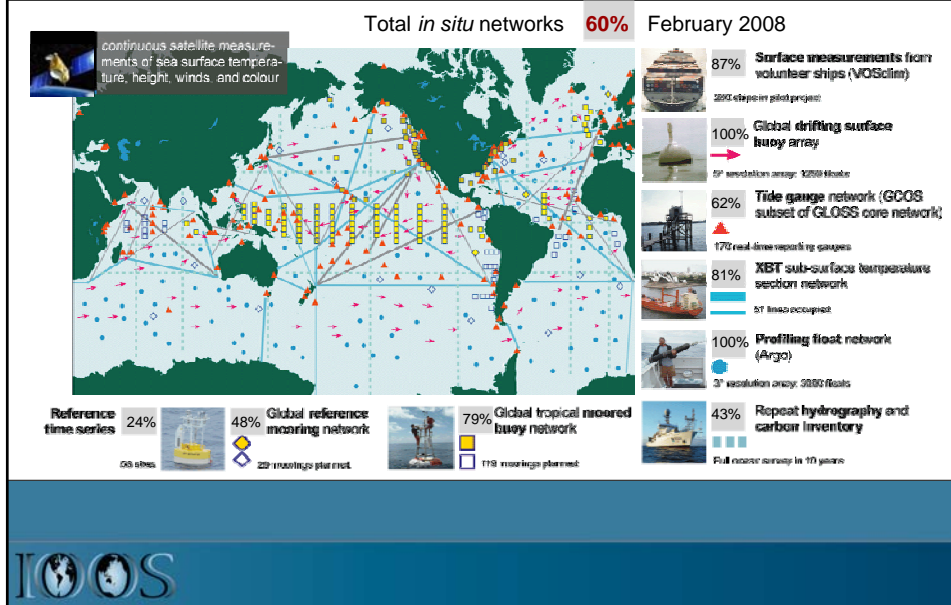


## IOOS office in NOAA

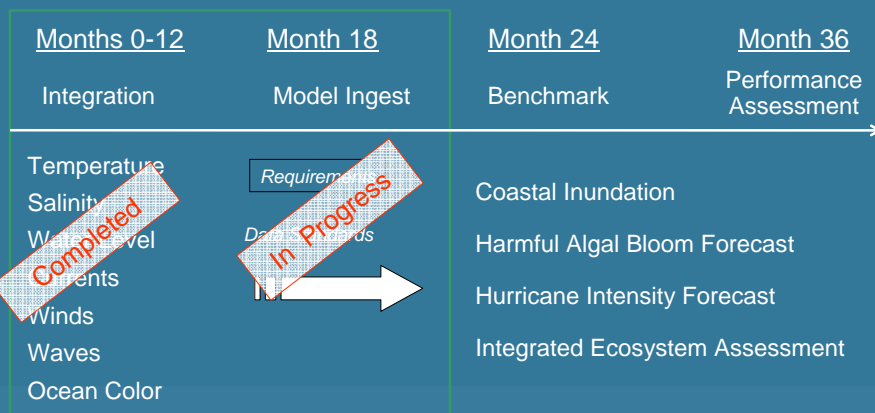
- Onboard Feb 09: 11 FTE; 5.5 onsite contractors; funds DMAC ST position located at NOAA/CSC
- Primary functions of the NOAA IOOS Program
  - Planning, Programming Budgeting and Execution (PPBES): IOOS Program Manager; includes NOAA's National Data Buoy Center
  - Executing Data Management: Data Integration Framework (DIF)
  - Planning for Data Management and Communications (DMAC)
  - Leading Regional Enterprise
  - Execute Current Year and Administer an office
  - Respond to Congressional, FACA, NOAA tasking
  - Provide Communications and Outreach
  - Provide International support; GOOS Regional and support I-GOOS vice chair



# IOOS®: Global Component

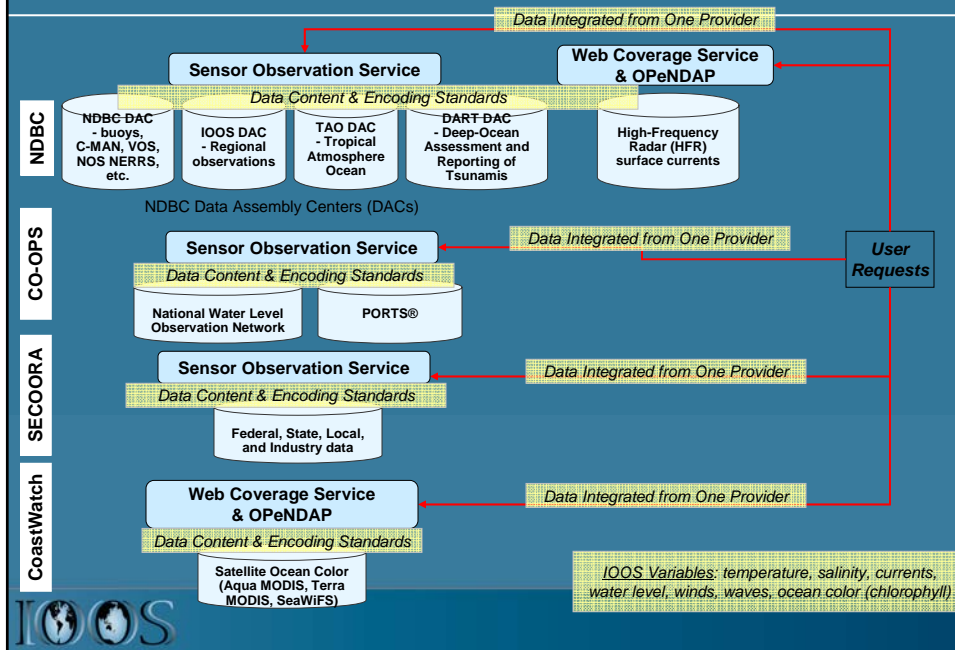


# Data Integration Framework (DIF)

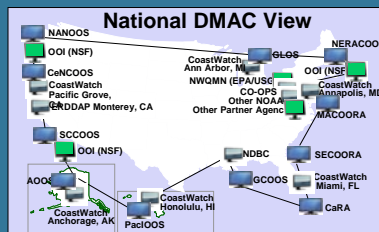


- Regional Implementation of the DIF
- Interagency/GEOS data management collaborations
- Documents at [www.ioos.noaa.gov](http://www.ioos.noaa.gov)

# DIF Data Provider Status – end of CY08



# National DMAC View



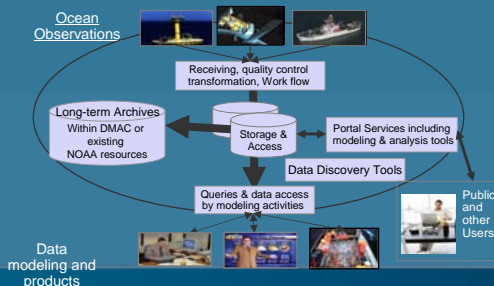
## Overview

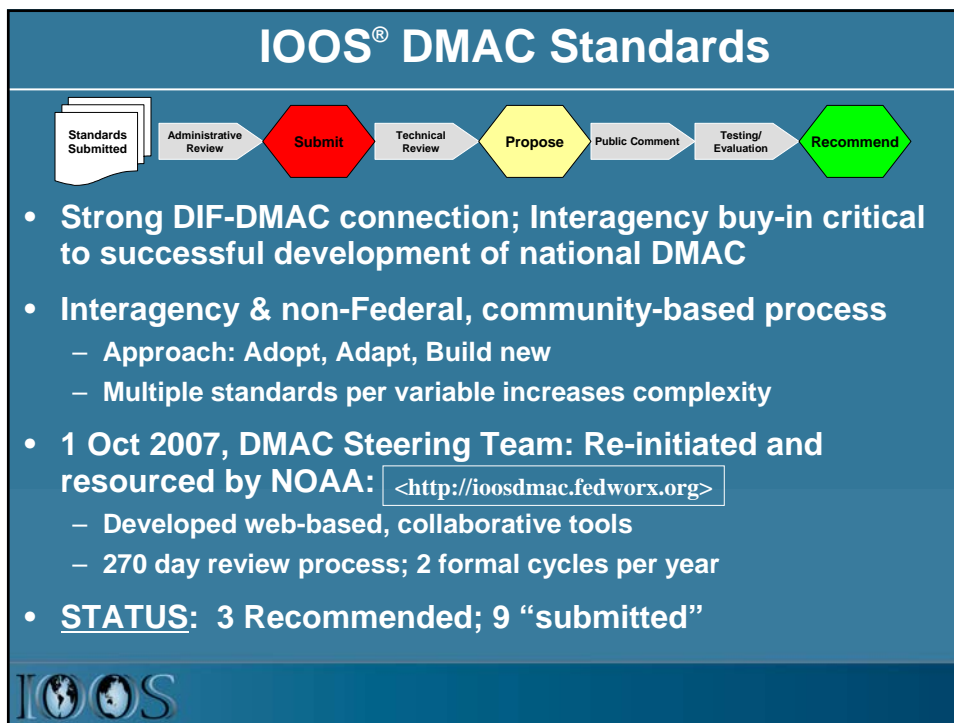
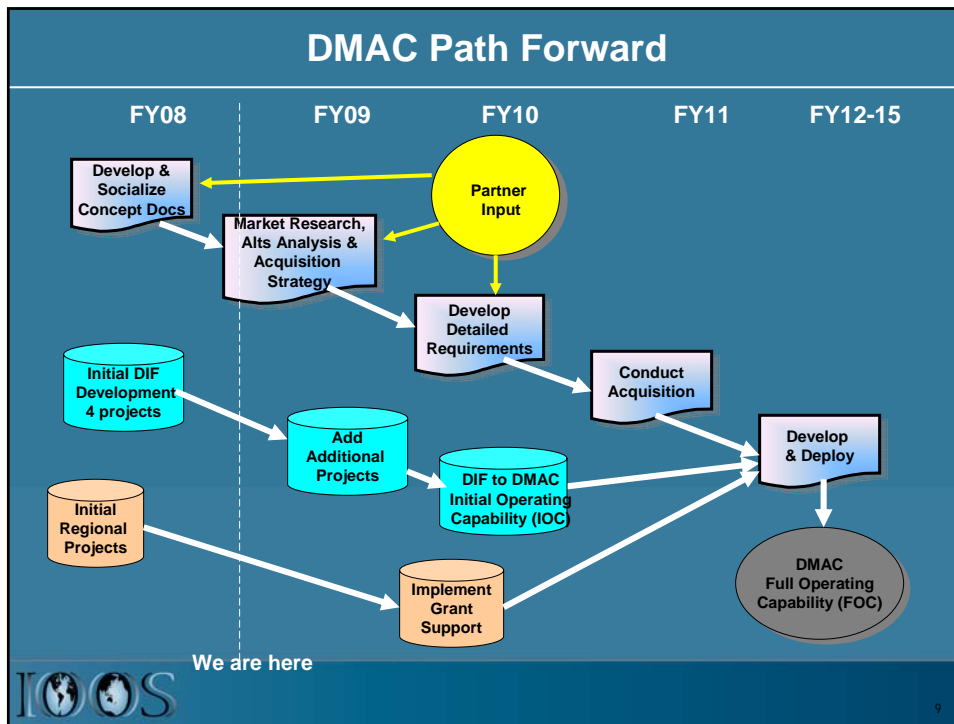
- Distributed Regional & Federal Data Assembly Centers
- Develops and manages technical design & standards
- Leverages existing Federal and Non-Federal technologies

## Functionality

- Integrated data #1 request
- Standardize, integrate, and simplify delivery of data from multiple sources
- Access to broader data resources to understand impacts of climate change and improved management decisions

## DMAC Functions and Interfaces





## Interagency/Partnership

- National Operational Waves Plan: At print for publication
- National HFR Plan: First Round of Comments collected
- Model Standards: Rich Signell USGS detail
- IOOS and National Water Quality Monitoring Network
  - Discrete measurements/sensor network
  - Regional Pilots
- IOOS and Marine Protected Area (MPA) FACA: White paper written, interagency group being formed; NOAA, EPA on the IOOS side
- IOOS and IOCM: working with IWG-IOCM for RA activities and requirements
- IWGOO: April 09 Industry Workshop
- Coastal Inundation Meeting: FL 10-12 Feb – bringing Federal and Regional together on end to end plan



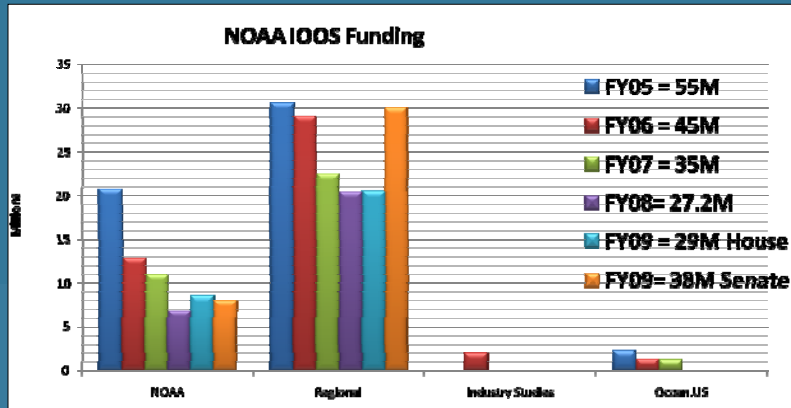
## Interagency/Partnership - cont

- IOOS and Ocean Biogeographic Information System (OBIS): Sharing data standards; monitoring mode with departure of Becky Shuford
- IOOS and Hydrographic Services Review Panel:
  - Waves (Army Corps) into PORTS® – MOU in work
  - Working to get IOOS Regional data/models into PORTS
- IOOS and OOI: Separate brief
- Shell Oil/NOAA Agreement
- EPA: support to NERACOOS – through USGEO
- DMAC ST
- West Coast Governors Agreement on Ocean Health – HAB summit: NOAA IOOS, 3 RAs participated



## NOAA IOOS Funding

- 2 Budget Lines in NOAA Budget: NOAA ICOOS and Regional IOOS
- ACT Earmark in FY08; FY09 House Mark



## Regional Partnership

- FY09: No FFO. Funding allocation philosophy
  - Fully fund RA planning agreements
  - Fund to FY08 levels
  - If Additional funding:
    - FY07 Focus 2/3
    - RCOOS/ACT
- FY10: Limited geographical FFO
- FY11: Define core capabilities for national competition
- Coordination of products and services to Federal Agencies
- Alliance for Coastal Technology
- Upcoming Event: 4 Mar Congressional



## IOOS Regions Supporting IOOS Missions

### Transportation/ Homeland Security

- Surface current data from >100 High Frequency Radar stations
- Improved tools for port pilots and ships entering major harbors
- High-resolution coastal mapping (funded by CA and Pacific NW) to NOAA standards
- Oil spill trajectory tracking (Cosco Busan)
- Delivering models of nearshore waves

### Ecosystems and Oceans Human Health

- Larval Sampling
- Harmful Algal Bloom monitoring: 4 RAs
- IEA data collection and support: 4 RAs
- Benthic habitat and species mapping (NEBO)
- Extension of CalCOFI transects
- Fisheries stock information and products support recreational and commercial fishing: 4 RAs
- Aquaculture: Data/products for shellfish growers (northwest); abalone (CA); lobster (northeast)

### Climate

- Coastal observations to monitor *local* impacts of global climate change
- Observations and data support state/CZM climate change adaptation plans:
  - LiDAR collection for hi-res topography
  - State Sea Level Rise plans (2 RAs)
  - Lead PI for 5-year NSF climate project
- Coastal Inundation modeling projects (4)

### Natural Hazards/Weather Prediction

- SE Marine Weather Portal – **single** site for marine weather data
- Providing data and products to WFOs:
  - New York City; Philadelphia; Boston; Wakefield, VA; Newport & Wilmington, NC; Honolulu, HI; and San Juan, PR
- Water Quality projects: 4 RAs

← Sensor Validation and Verification Services →



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## Energy

- **Regional Associations leading IOOS effort**
- **2 February meeting: NERACOOS, MACOORA, SECOORA**
  - Permitting issues
  - Environmental Collection
  - Support to/from wind developers
- **West Coast: wave energy**
- **Many meetings, which are the best ones to attend**
- **Follow up IOOS led energy meetings**



## Questions?



“Providing information needed to improve safety, enhance our economy and protect our environment”

<http://ioos.noaa.gov>

