

NATIONAL MARINE PROTECTED AREAS CENTER

www.mpa.gov

MPA IOOS Task Team Progress

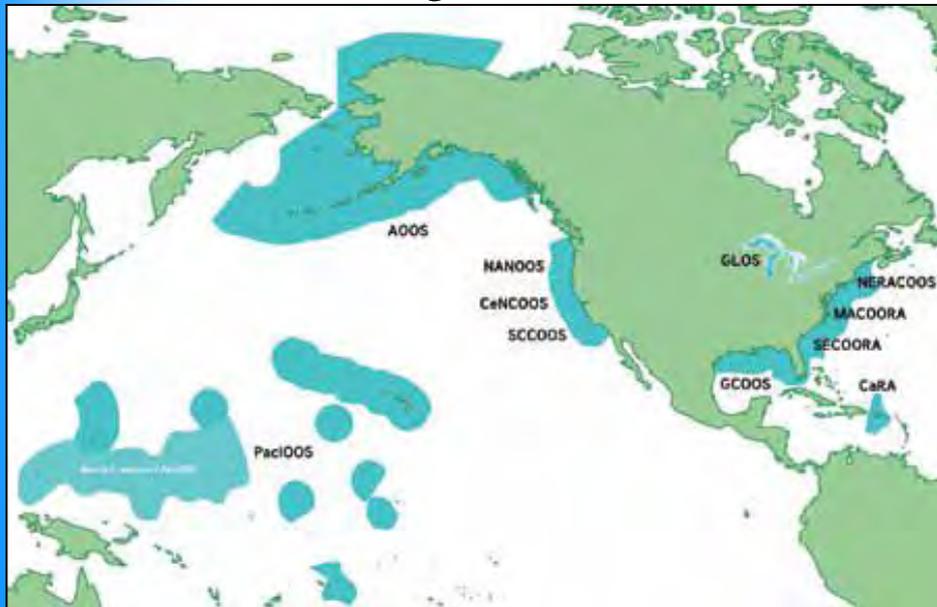
Rondi J. Robison, MPA Center & Charles
Alexander, IOOS
November 2010

U.S. Department of Commerce, National Oceanic and Atmospheric Administration
National Ocean Service
Office of Ocean and Coastal Resource Management

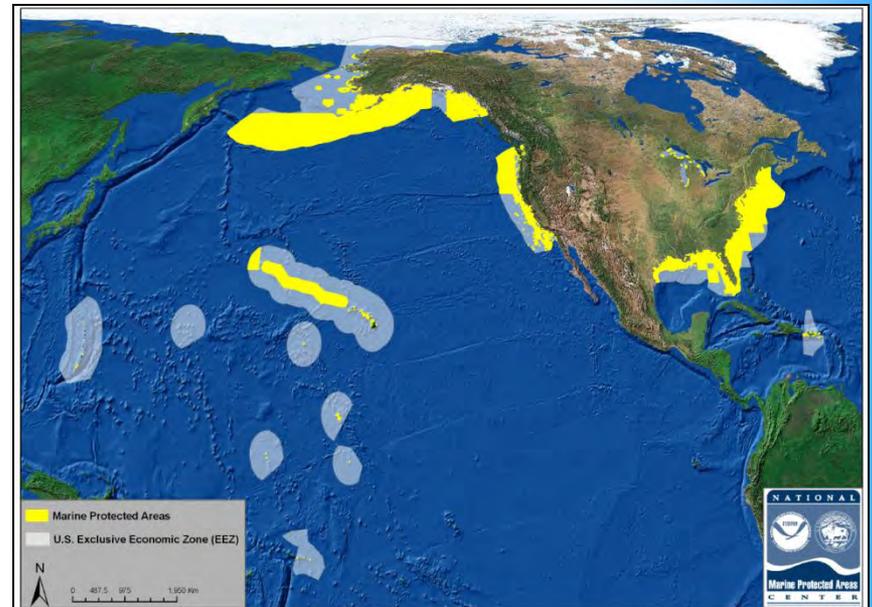


Place-based, National Programs

U.S. IOOS – 11 Regional Associations



U.S. MPAs & EEZ



Recommendations of the MPA Federal Advisory Committee

Linking Ocean Observing Systems with the National System of MPAs

Passed Unanimously, November 2008

Three primary recommendations to be implemented by the appropriate managing authorities:

- I. Establish a strong linkage between the National System of MPAs and the Integrated Ocean Observing System (IOOS®).
- II. Create an interagency working group to enhance cooperation between the National System of MPAs and the IOOS.
- III. Increase and stabilize funding for integrated monitoring by the IOOS and the National System of MPAs.

Task Team 2010

- Identify to strengthen and expand the linkages
- Short-term
- Action focused
- 12 members
 - 9 Federal agencies
 - 2 IOOS Regional Associations

Charge to MPA/IOOS Task Team

- Identify **end user products** MPA managers need to determine if the MPA & MPA network are operating as designed
- Identify **environmental parameters and processes** that are most important to MPA managers to enhance understanding of dynamic marine ecosystems and ecosystem health
- Recommend steps to **expand the environmental reference network** by adding marine sites

MPA/IOOS Task Team & Experts

MPA IOOS Task Team Members (11):

- Mr. Charly Alexander, IOOS
- Dr. Robert Brock, NOAA/NMFS & MPA Ctr.
- Mr. Thom Curdts, National Park Service
- Ms. Heather Kerkering, CeNCOOS
- Dr. Brian Melzian, EPA*
- Dr. Ru Morrison, NERACOOS
- Ms. Rondi Robison, MPA Center
- Dr. Whit Saumweber, NERR*
- Dr. Karsten Shein, NCDC*
- Ms. Julia Townsend, MPA Center
- Mr. Bret Wolfe, US Fish and Wildlife

**attended portion of discussions via phone*

Attending Experts (14):

- Dr. Sarah Allen, National Park Service
- Dr. Lisa Beever, National Estuarine Program
- Dr. Stephen K. Brown, NOAA/NMFS
- Dr. Gary Davis, GEDavis and Associates & MPA Federal Advisory Committee
- Dr. Steve Gittings, National Marine Sanctuaries
- Dr. Phil Levin, National Marine Fisheries Service
- Dr. Dwayne Porter, University of South Carolina
- Dr. Cheri Recchia, California MPA Monitoring Enterprise
- Dr. Steve Rumrill, University of Oregon & South Slough National Estuarine Research Reserve
- Mr. Joe Schumacker, Quinault Indian Nation & MPA Federal Advisory Committee
- Dr. Curt Storlazzi, USGS
- Dr. Charlie Wahle, MPA Center
- Dr. Brock Woodson, Stanford University
- Mr. Joseph Uravitch, MPA Center

Workshop Objectives

- A list of Ocean Monitoring parameters and/or processes;
- A description of a proof of concept observing activity
- A listing of key considerations and recommendations on the integration of MPAs as potential “reference” sites into the IOOS and on expanding the Climate Reference Network to marine sites.

Workshop Results

- **MPAs as platforms for ocean monitoring**
- **Monitor MPAs for impacts of climate change**
- **Capitalize on existing parameters and processes being collected through partnerships**
- **Identify gaps in parameters and processes that are needed to monitor impacts of climate change in MPAs**

Template for Priority Descriptions

- **Title**
- **Description**
- **Goals**
- **Objectives**
- **Tasks**
- **Benefits**
- **Timeframes**
- **Examples applications**
- **Potential partners**
- **Cost estimate**

Candidate Products/Deliverables

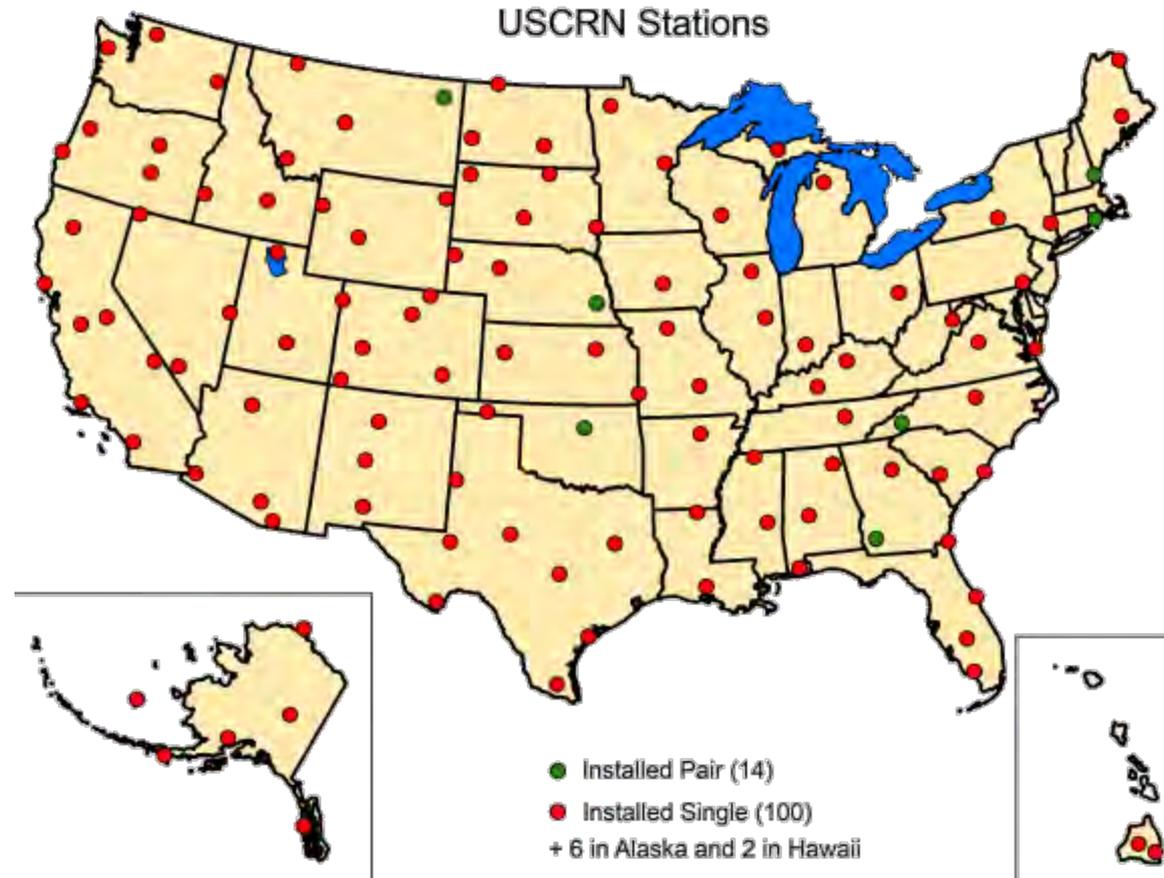
1. **Expansion of Climate Reference Network to MPAs**
2. **Information Discovery Portal**
3. **Demonstration of Emerging Technologies**
4. **Regional MPA Associations**
5. **Outreach: Ocean Observing Systems and MPAs**
6. **Periodic Assessment of Marine Resources within an example IOOS Area**

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CRN Network

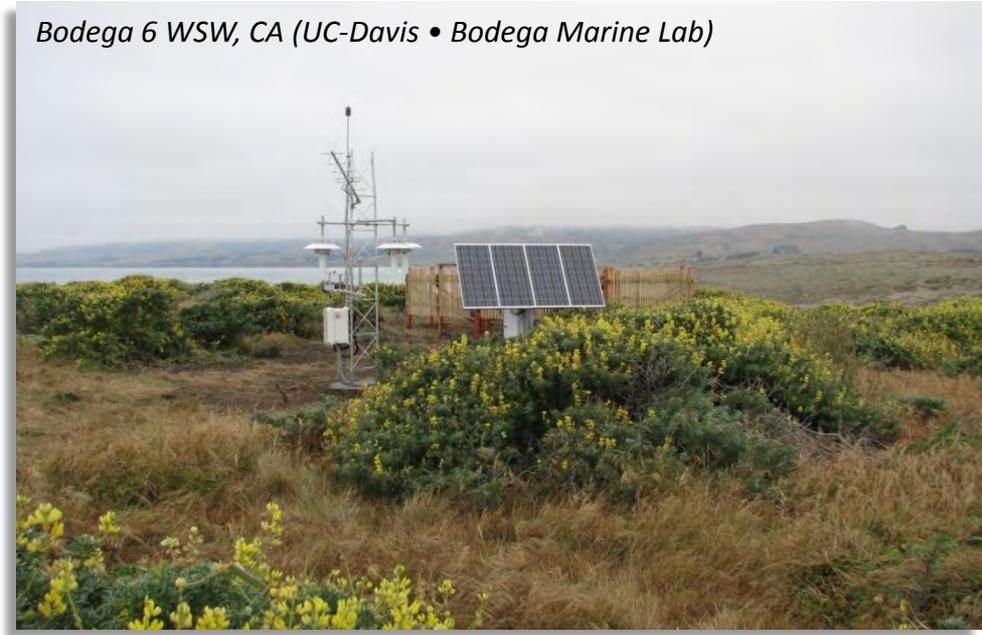
- 114 Stations
- First 40 stations commissioned 2004
- 114th station installed in 2008
- 2009 added soil moisture, temperature and RH
- Adheres to 10 GCOS Climate Monitoring Principals
- Plans:
 - 29 additional sites in AK (FY09)
 - some international (e.g., Tiksi, Russia)



A marine vision?

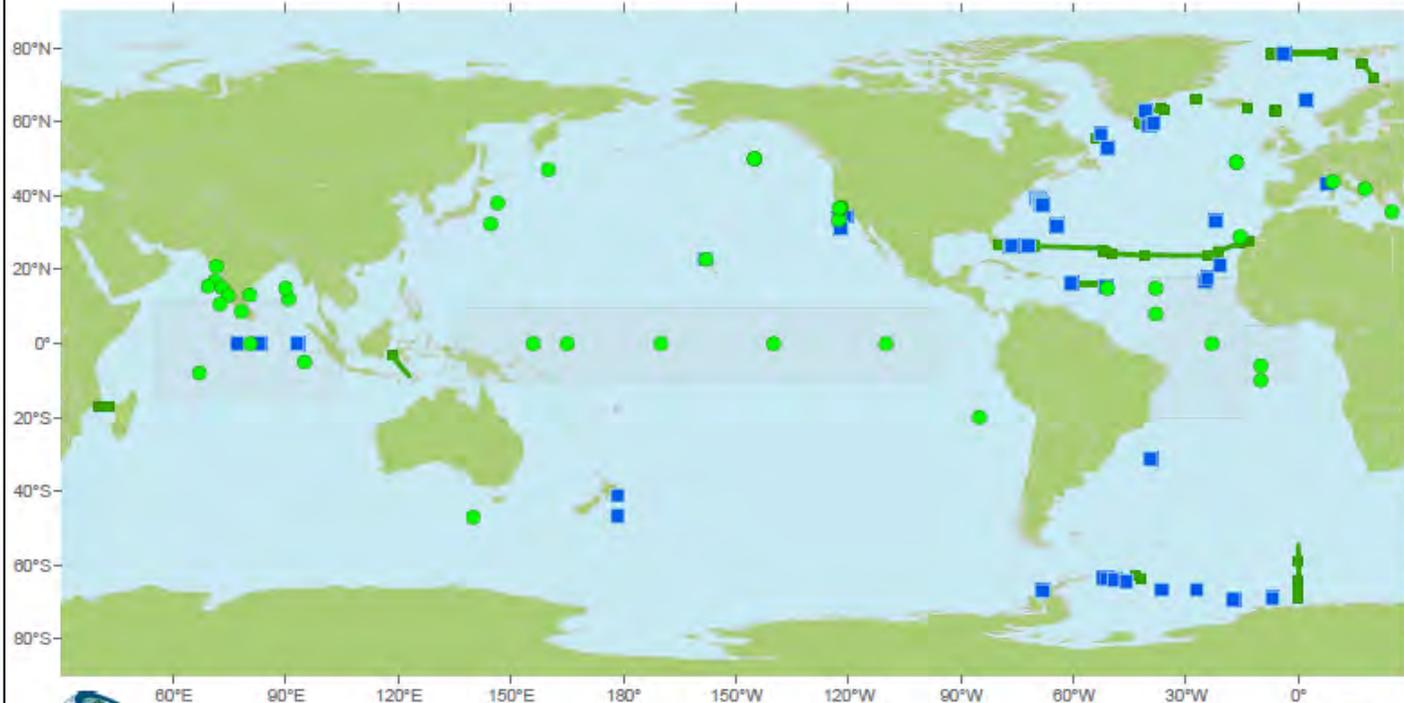
- Additional CRN stations situated inside MPAs
- Addition of standard marine element observations with dedicated monitoring and maintenance
- Resolve climate change and variation inside and around MPAs
- Seamless integration of observation with national and global climate observations
- Improved understanding of coastal and near-shore climate change and variability
 - Inform impact, vulnerability and adaptation planning

Bodega 6 WSW, CA (UC-Davis • Bodega Marine Lab)



OceanSITES

Taking the pulse of
the global ocean



OceanSITES Status Map 2009 - Operating Sites



OceanSITES Moorings and Observatories (91) Transport sites (16)

- OPERATING Real time data (44)
- OPERATING Delayed Mode data (47)
- OPERATING
- Transport Stations

Note: This status was based on information provided in 2009.

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IOOS Catalog

[Help](#)

Service notice: We have found that Internet Explorer is slow to display this page, and we are investigating. Firefox, Safari and Chrome browsers work well.

1531 Platform s 78 Rectangles.

Variables:

Cluster platforms

Click the dots for in-situ observations.

Click the rectangles for gridded data.

Receive observations with:

No observations

Start:

End:

Regions:

Search by bounding box mode.

(Click a gridded data rectangle to filter platforms.)

Service types:

Servers:

Data Providers on this Server

All

Data Providers:

Data Products in overlapping rectangles:

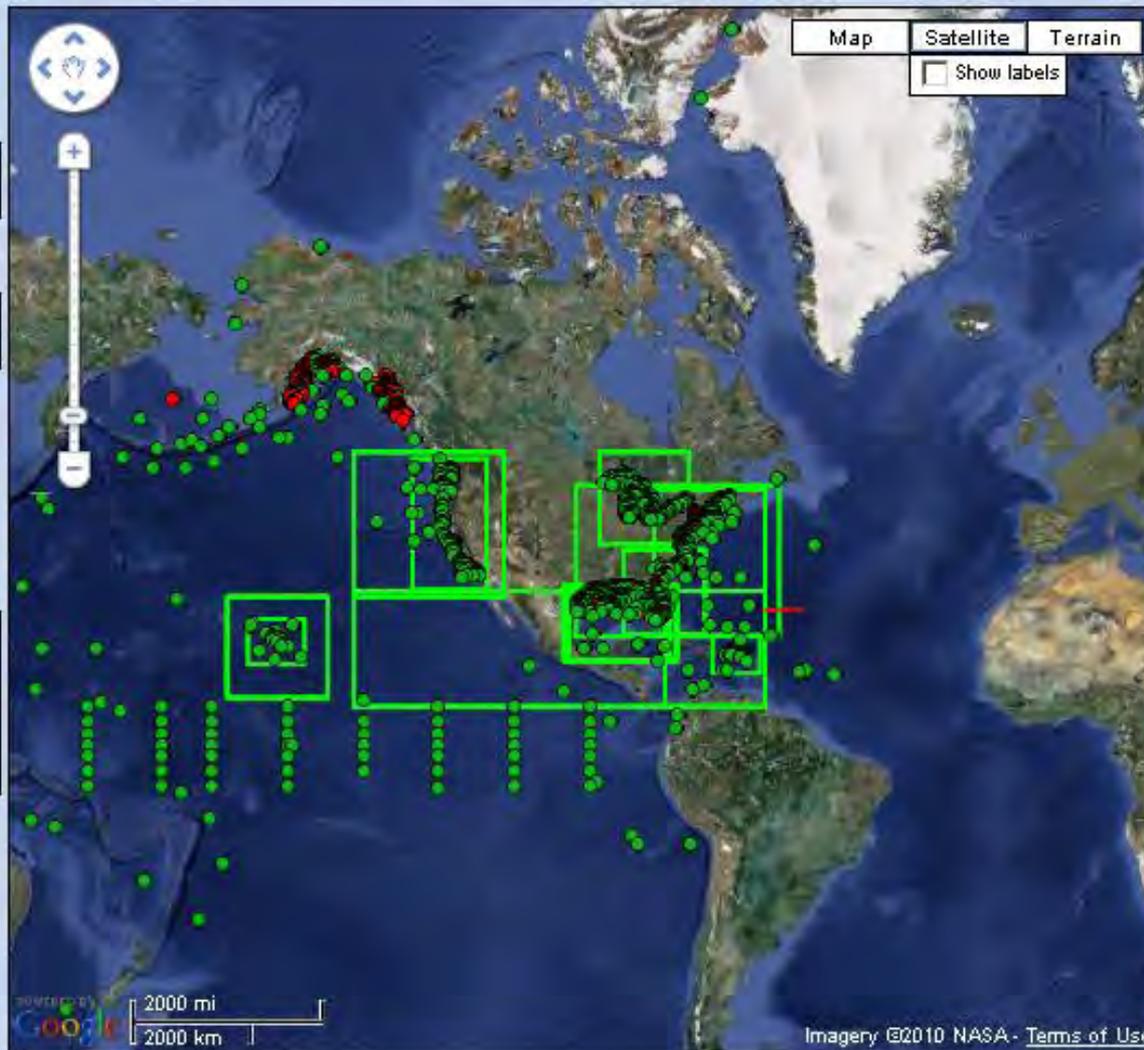
[Bookmark this view \(right-click this link\)](#)

[Download station for IOOS gridded data set rules](#)

[Download all SOS Platforms \(XML\)](#)

[Download all TDS Rectangles \(XML\)](#)

Reload the page to refresh observations.



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RUTGERS

JERSEY ROOTS, GLOBAL REACH

The Scarlet Knight's Trans-Atlantic Challenge

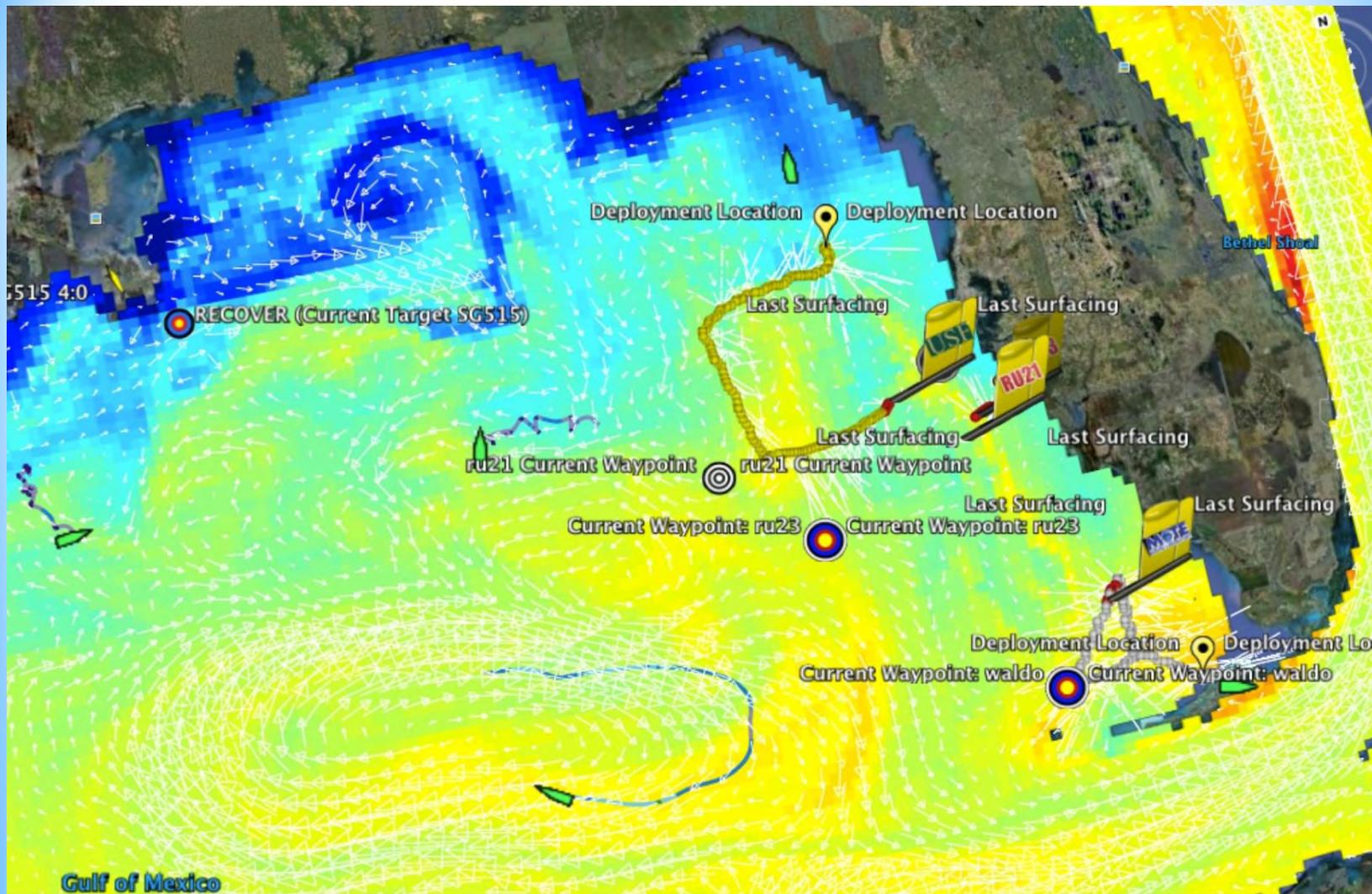
- A ROBOT'S EXPLORATION OF THE UNKNOWN OCEAN -

HOME ABOUT THE MISSION FOLLOW ALONG FLIGHT STATUS CONTACT US PARTNERS

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Support for Deepwater Horizon



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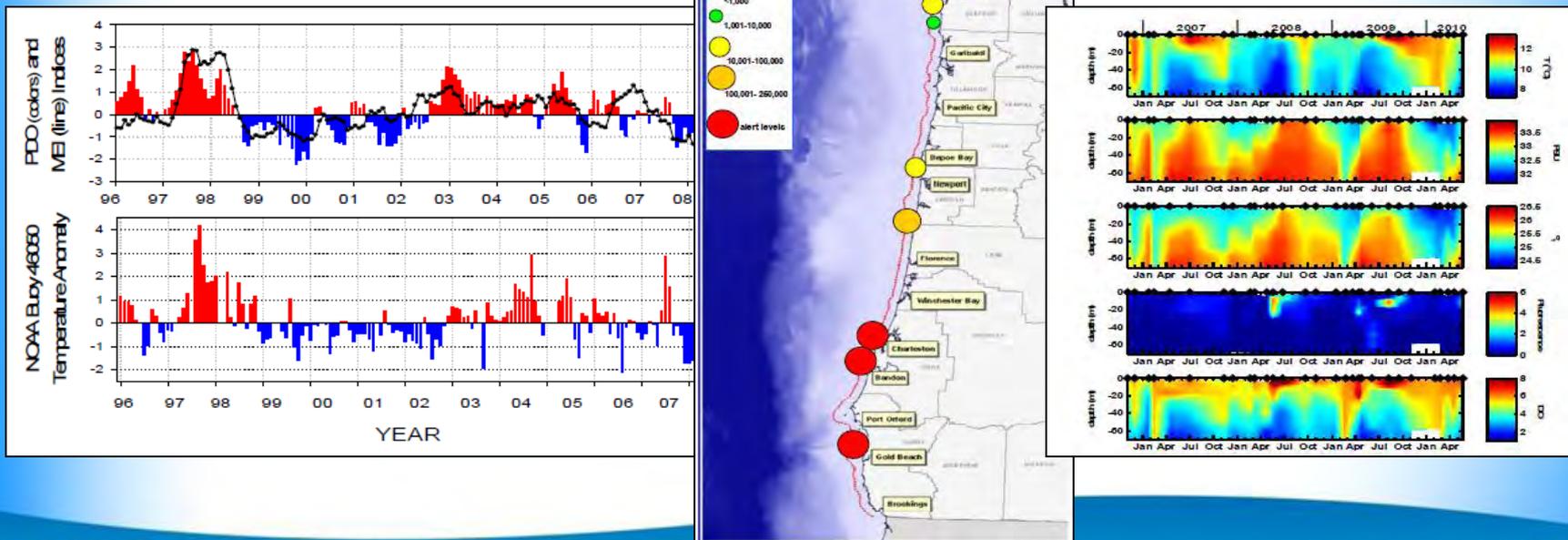
Physical and Ecological Conditions in the California Current LME for April to June, 2010

Summary of climate and ecosystem conditions for Quarter 2, 2010 for public distribution, compiled by PaCOOS coordinator Rosa Runcie (email: Rosa.Runcie@noaa.gov). Data and management decisions are summarized when they are made available and don't necessarily coincide with the publication of the quarterly.

Full content can be found after the Executive Summary. Previous quarterly summaries of climate and ecosystem conditions in the California Current can be found at <http://pacoos.org/>

PHYSICAL CONDITIONS

- **El Niño Southern Oscillation (ENSO):** Conditions continue to be favorable for a transition from El Niño to La Niña conditions during the second half of 2010.
- **Pacific Decadal Oscillation (PDO):** Positive PDO values occurred from March to May in concert with weakening of the El Niño in the t



Next Steps

- Presentation of progress
 - November 2010: MPA FAC meeting
 - November 2010: Regional Coordination Workshop
 - National System Partners
- Complete Task Team Report with Recommendations
- MPA managing agencies
 - Vet results



Thank You!

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