

# West Coast Regional Harmful Algal Bloom Summit

## “Setting the Context”

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West Coast Regional HAB Summit  
Portland, Oregon  
February 10-12, 2009



# Why we are here

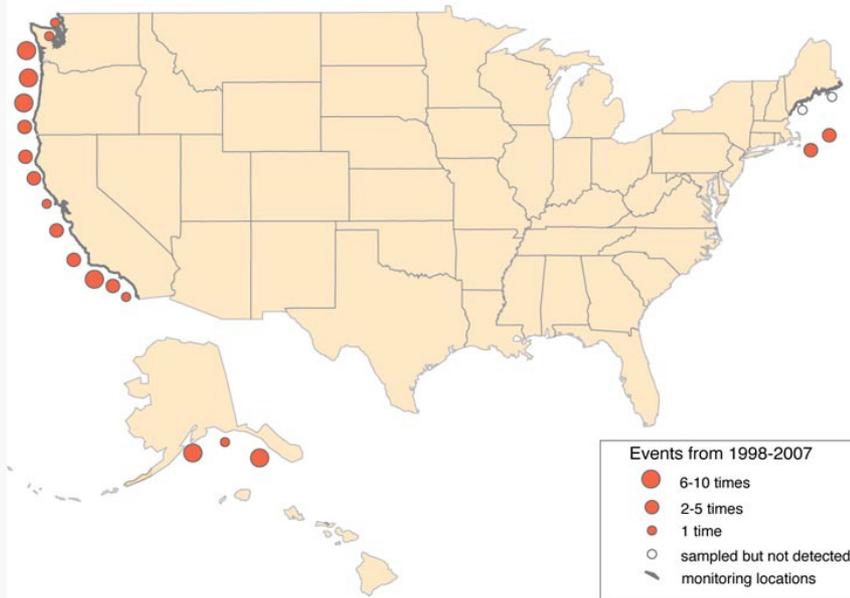
To advance regional coordination for predicting and mitigating the environmental, economic, and human health impacts of harmful algal blooms (HABs) on the west coast.



# Need for Regional (Tri-state) Coordination

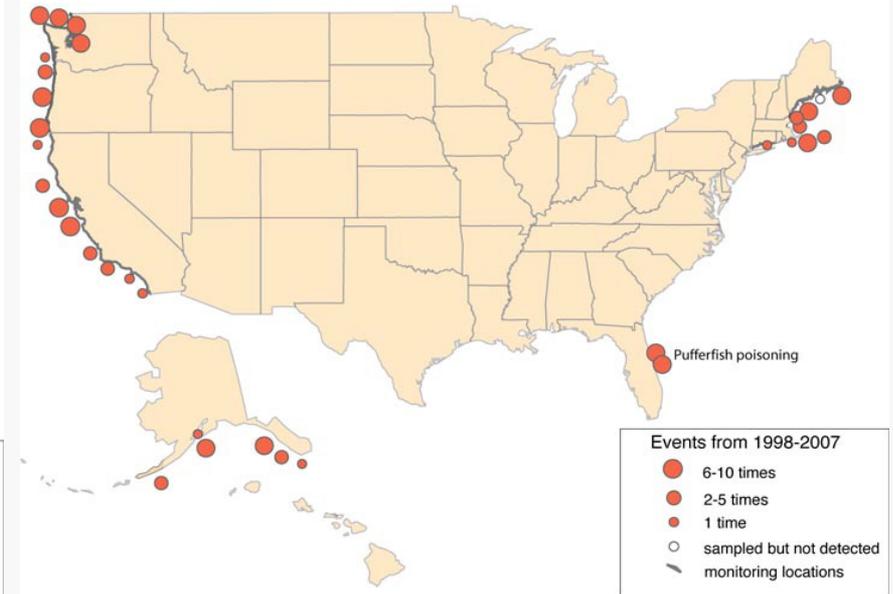
## *Pseudo-nitzschia*: ASP

Presence of ASP Toxins in Seafood in the U.S.



## *Alexandrium*: PSP

Presence of PSP Toxins in Seafood in the U.S.

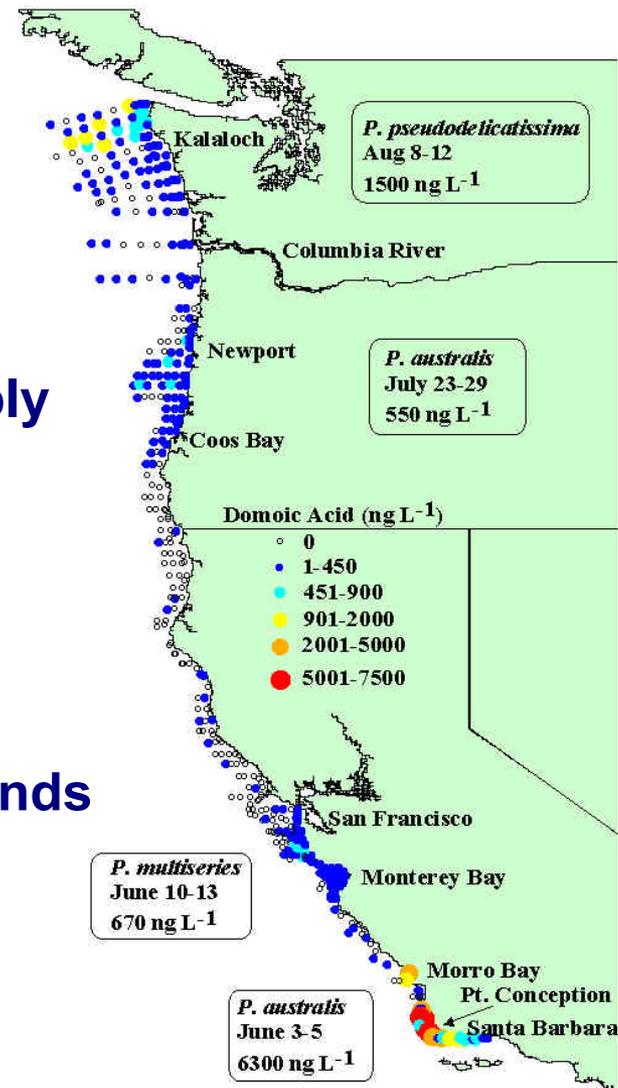


From the U.S. National Office for Harmful Algal Blooms website, <http://www.whoi.edu/redtide/>

# Need for Regional (Tri-state) Coordination

## Regional Considerations

- Dominant processes are large scale
- Upwelling is dominant nutrient supply
- North to south advection
- Retentive areas may promote HABs
- Fast response to winds
- Particles move to the coast when winds reverse



Domoic acid in *Pseudo-nitzschia* species on the U.S. Pacific West Coast in 1998. From Trainer et al. 2000; 2001; Hickey and Banas 2003



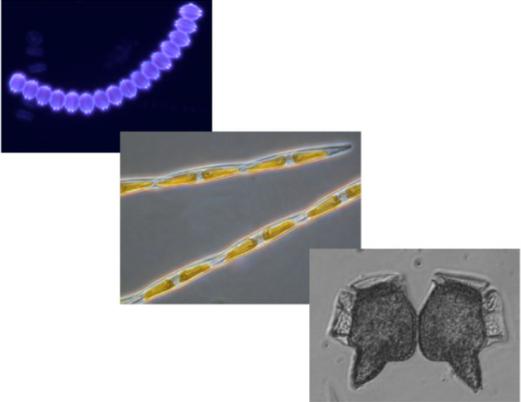
# Examples of HAB Monitoring and Forecasting Systems on the West Coast

- *ORHAB* (Olympic Region HAB Partnership)
  - Washington
- *MOCHA* (Monitoring Oregon Coastal Harmful Algae)
  - Oregon
- *Cal-PReEMPT* (California Program for Regional Enhanced Monitoring for Phycotoxins)
  - California



THE REGIONAL WORKSHOP FOR HARMFUL ALGAL BLOOMS (HABS) IN CALIFORNIA COASTAL WATERS

April 2-3, 2008 Workshop Proceedings



Center for Sponsored Coastal Ocean Research

Established 1993

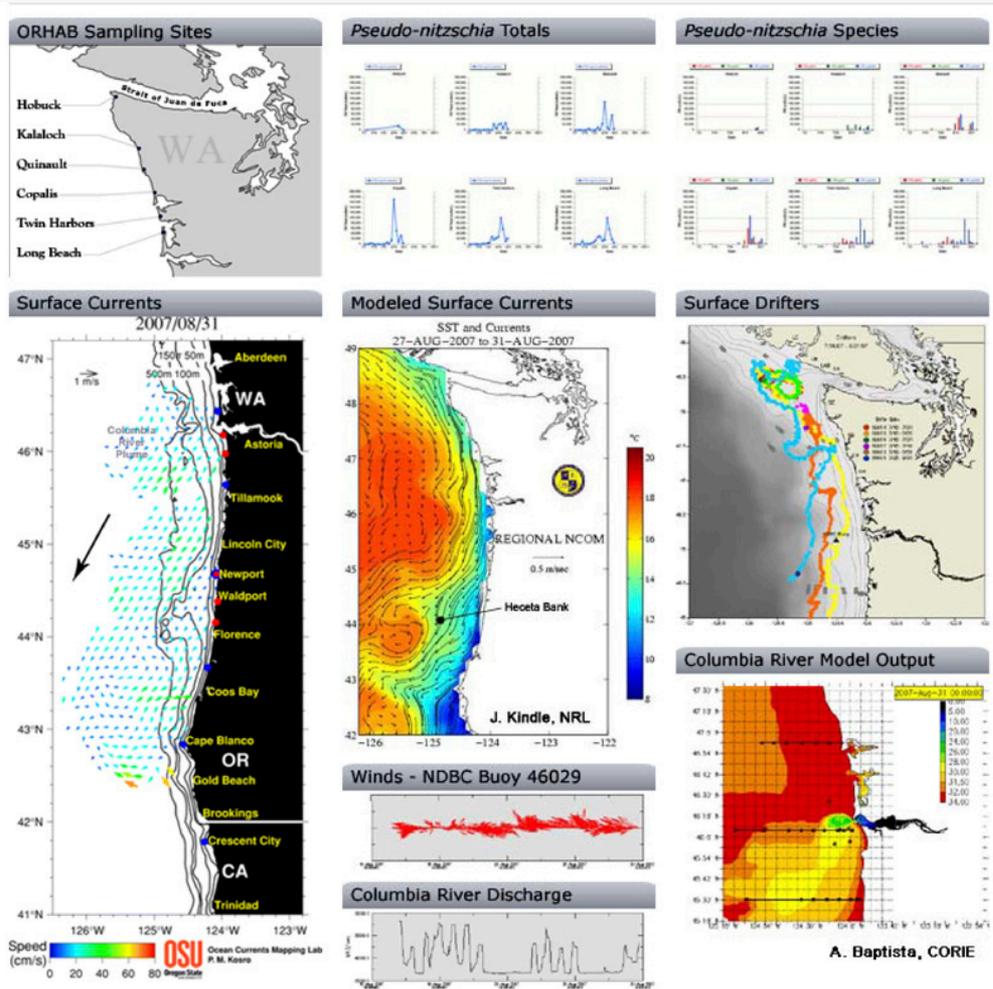
Connecting Science to Ocean Management



HABMAP

CALIFORNIA HAB  
MONITORING and ALERT  
PROGRAM

# Washington State PNW-HAB forecasting and alert bulletin



## Bulletin components

Sites

*Pseudo-nitzschia*

Species

Currents

Winds

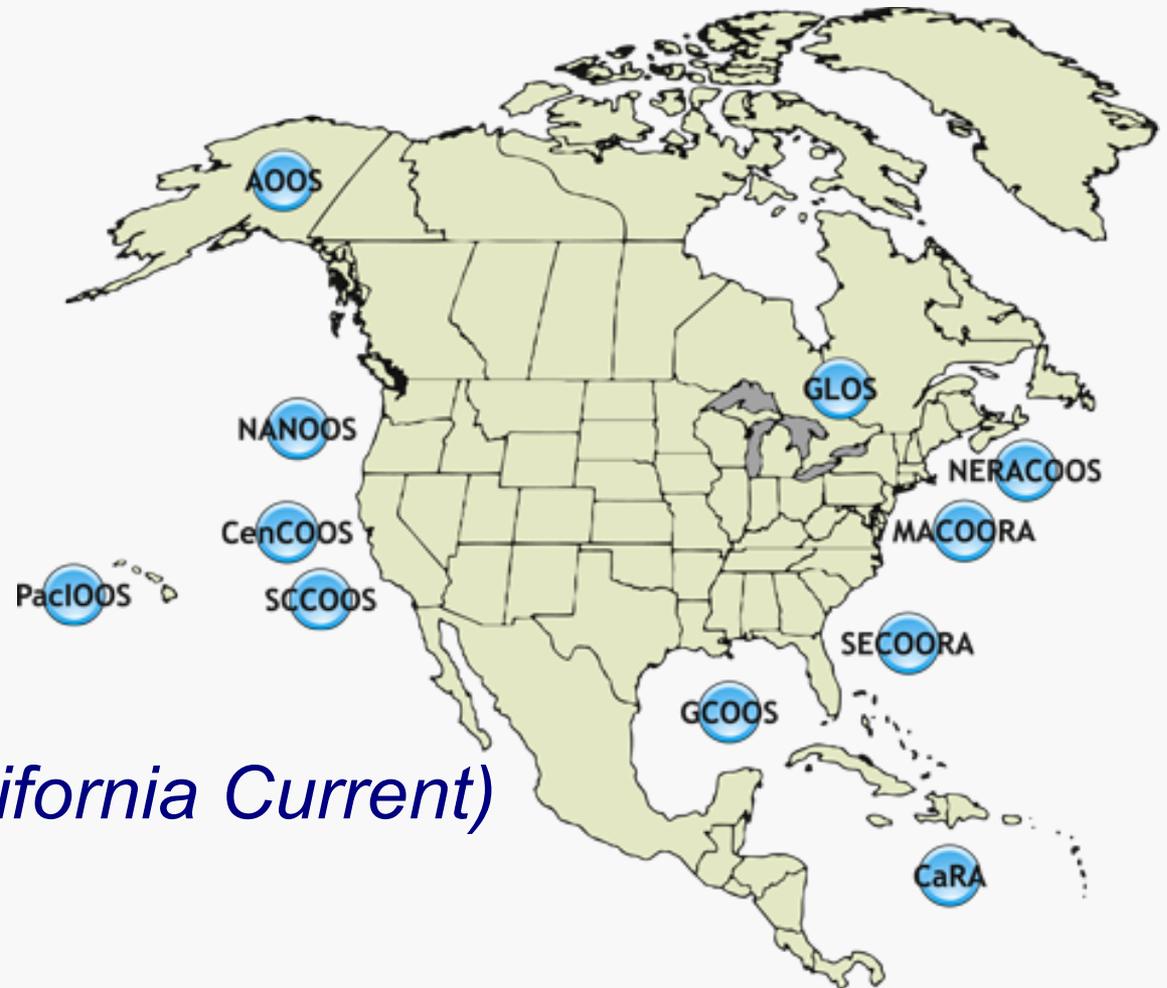
Columbia River

Drifters

Narrative

# IOOS Regional Associations on the West Coast

- *NANOOS*
- *CeNCOOS*
- *SCCOOS*
- *PACOOS (California Current)*



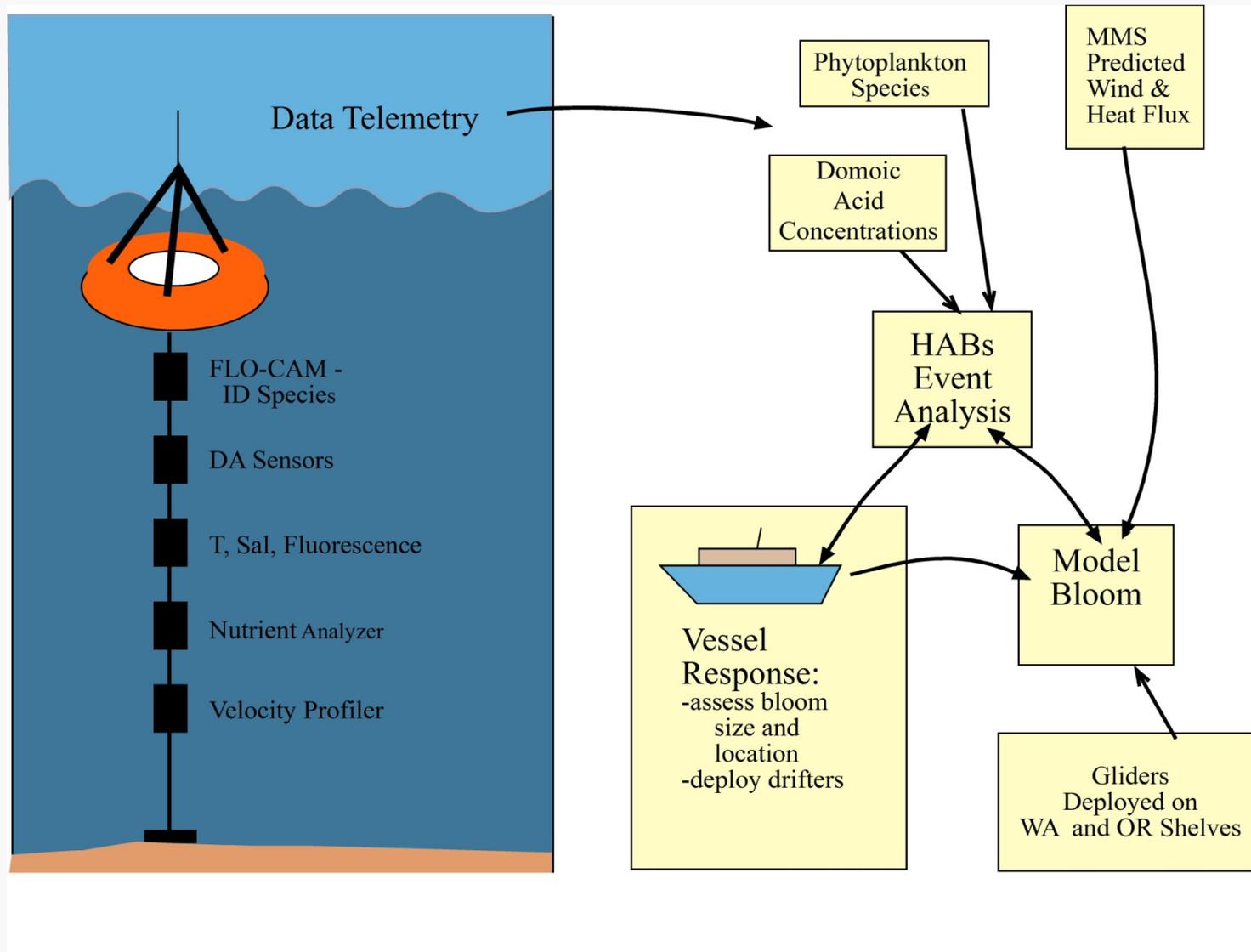


# West Coast Governors Agreement on Ocean Health

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- Three West Coast Governors signed an agreement on ocean health in September 2006
  - The Agreement identified **7 priority areas** for the states to work together
  - The Agreement asked for an Action Plan which was released in July, 2008.

Website: <http://westcoastoceans.gov/>

# Vision for the future



Design is tailored to the needs in each region



## Summit Outputs:

- *West Coast HAB Monitoring, Alert, and Response Network*
- *West Coast Regional Forecasting System*

