



## Item 5: Update on the Implementation of Assembly Bill 2139

Jenn Phillips and Sara Briley

January 31, 2018

# AB 2139 (Williams)

- Signed September 2016
- Stemmed from recommendations of West Coast OAH Panel

## Directives to OPC

*(subject to funding availability)*

1. Develop an ocean acidification and hypoxia (OAH) science task force
2. Take actions to address OAH
3. Adopt recommendations for further actions at the first meeting of each year, starting 2018



# 1. OAH Science Task Force

---

**Mission:** The Task Force will serve as a responsive advisory body that will provide scientific guidance to the OPC in an ongoing manner to inform continued actions on ocean acidification and hypoxia in California and along the West Coast.

## Task Force Members

1. **Stephen Weisberg**, Southern California Coastal Water Research Project Authority, *Co-Chair*
2. **Francis Chan**, Oregon State University, *Co-Chair*
3. **Sarah Cooley**, Ocean Conservancy
4. **Jim Barry**, Monterey Bay Aquarium Research Institute
5. **Lisa Levin**, Scripps Institution of Oceanography, UC San Diego
6. **Richard Feely**, NOAA - Pacific Marine Environmental Laboratory
7. **Shallin Busch**, NOAA - Ocean Acidification Program
8. **Alexandria Boehm**, Stanford University





## 2. Take Actions to Address OAH

---

1. Develop, refine, and integrate predictive models
2. Ensure that criteria and standards for coastal water health address ocean acidification and hypoxia are informed by the best available science
3. Identify areas in CA vulnerable to ocean acidification and hypoxia
4. Advance joint priorities for ocean acidification and hypoxia research with diverse state, regional, national and international partners
5. Identify gaps between the monitoring of OAH and management needs, and the actions necessary to address these gaps

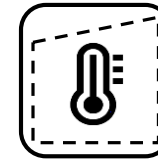
## 2. Take Actions to Address OAH

---

1. Develop, refine, and integrate predictive models
2. Ensure that criteria and standards for coastal water health address ocean acidification and hypoxia are informed by the best available science
3. Identify areas in CA vulnerable to ocean acidification and hypoxia
4. **Advance joint priorities for ocean acidification and hypoxia research with diverse state, regional, national and international partners**
5. **Identify gaps between the monitoring of OAH and management needs, and the actions necessary to address these gaps**

# West Coast OAH Monitoring Inventory

- Vision - improved OAH monitoring capacity along the West Coast through jointly building an integrated monitoring network aimed to address management needs.
- British Columbia, Alaska, Washington, Oregon, and California have inventoried their research and monitoring communities.
- **ALL of the information collected is being made into digital tools and web maps for the use of natural resource managers and researchers**



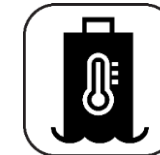
5  
Survey Areas

36  
Shore-Side  
Sensors



16  
Tracks

94  
Moorings



988  
Cruise  
Stations

1153  
Sample Sites

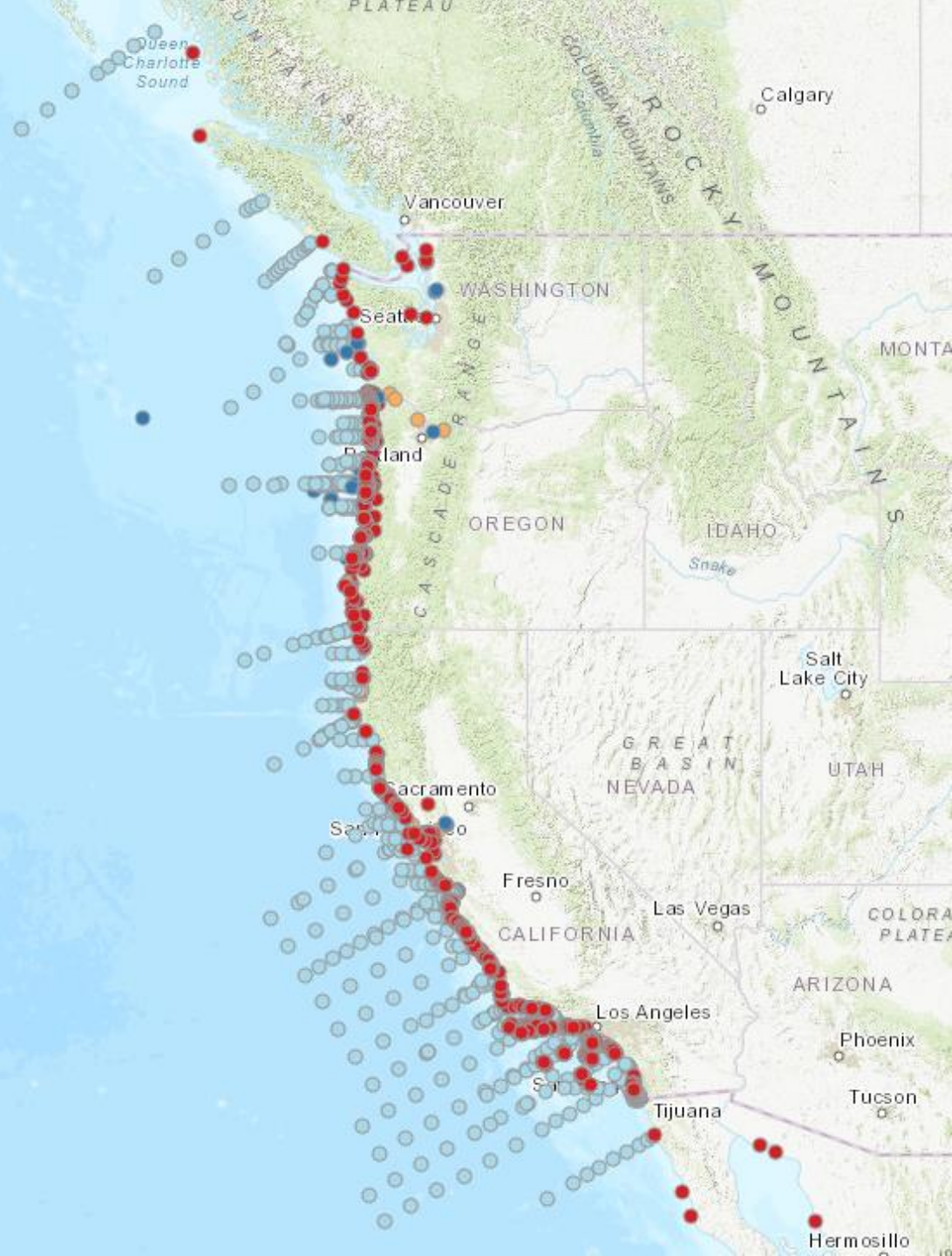


# Monitoring Assets

## Legend

### California/Oregon OAH Inventory Point Asset Type

- Sample Site
- Shoreside Sensor
- Cruise Station
- Mooring
- Other



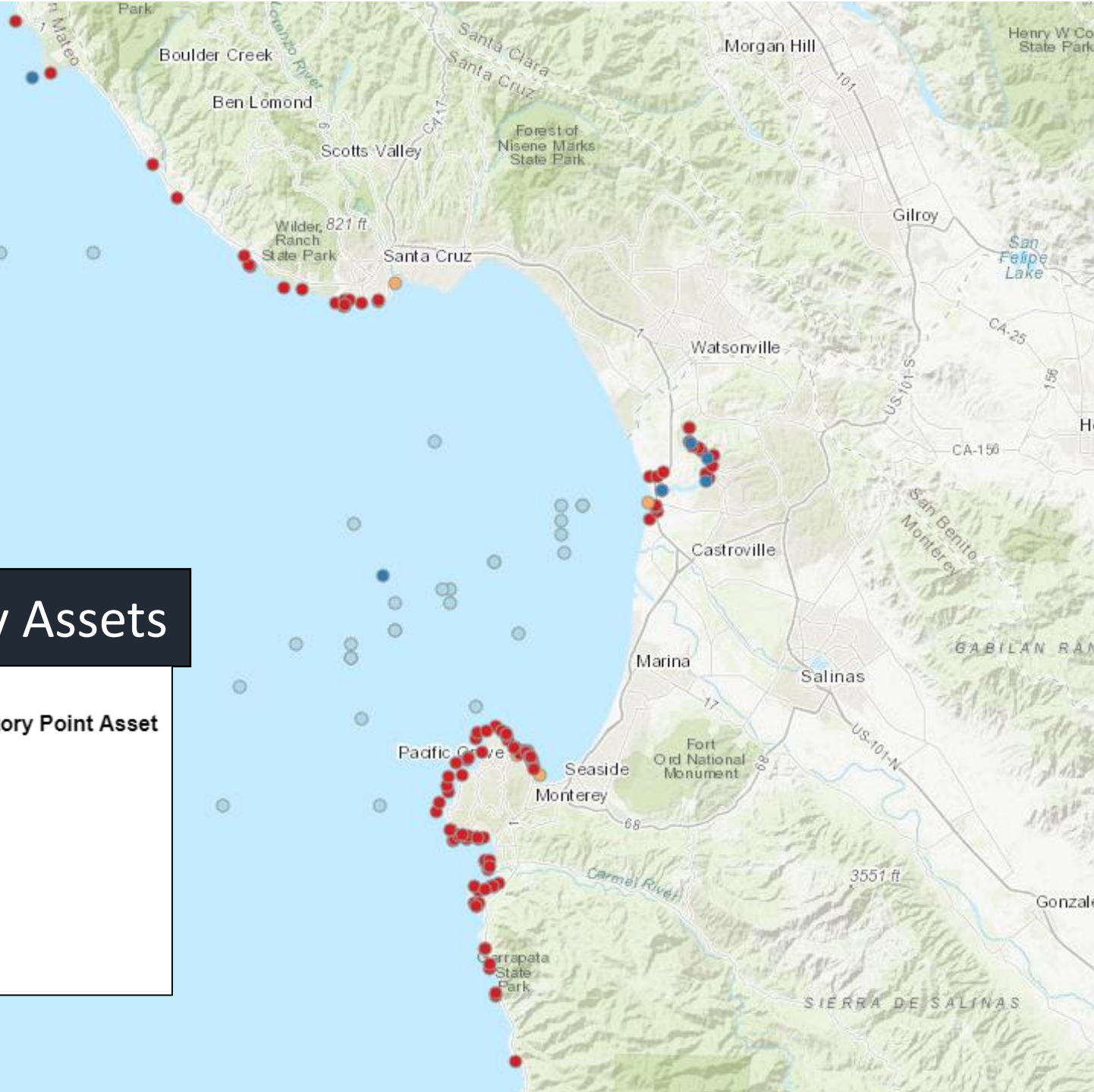


# Monterey Bay Assets

## Legend

### California/Oregon OAH Inventory Point Asset Type

- Sample Site
- Shoreside Sensor
- Cruise Station
- Mooring
- Other





# Monterey Bay Assets

## Legend

### California/Oregon OAH Inventory Point Asset Type

- Sample Site
- Shoreside Sensor
- Cruise Station
- Mooring
- Other

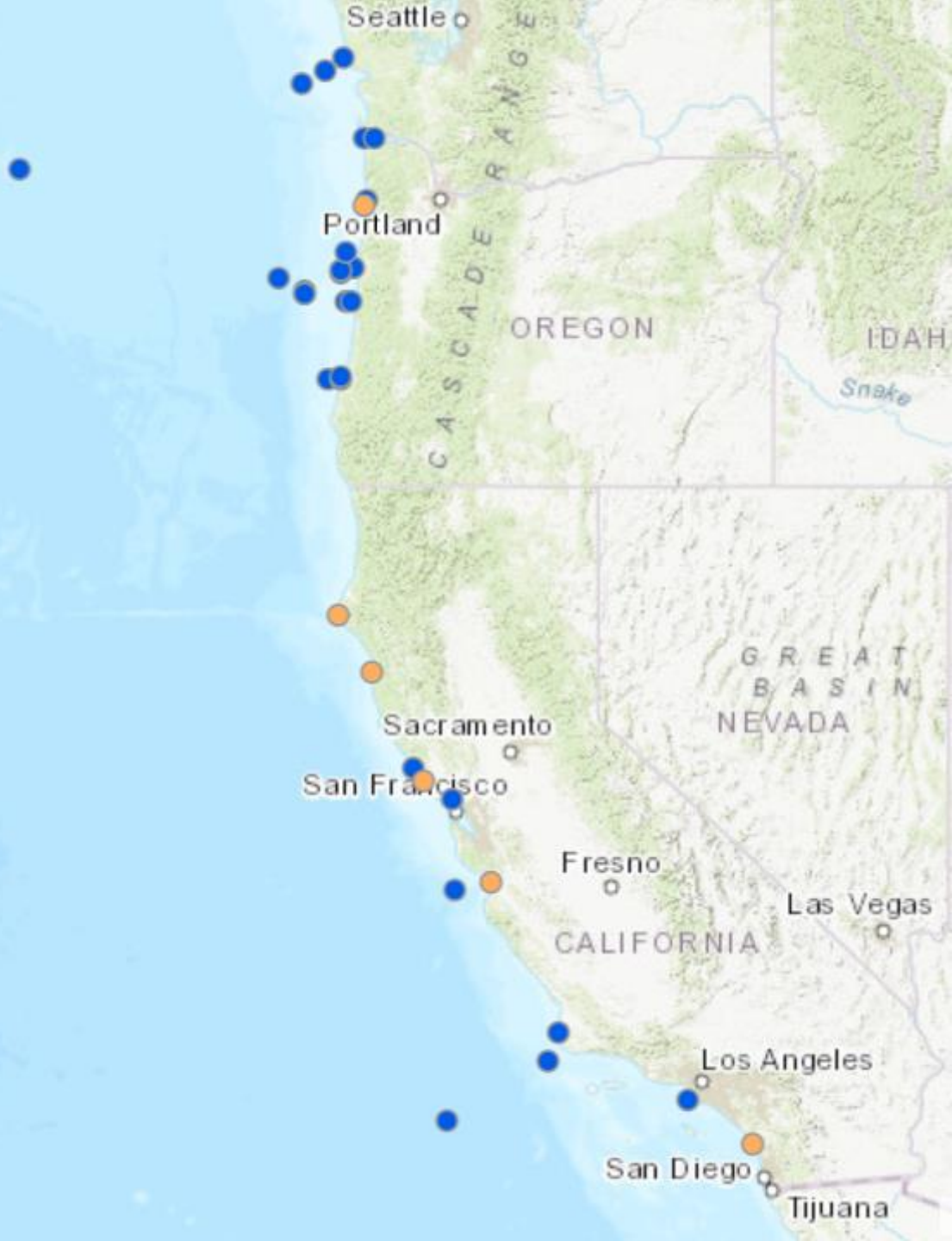
ProjectID	CeNCOOS shore-based
AssetID	Moss Landing
Jurisdiction	
DataFormat	point
Institutions	
URL	<a href="http://seawater.mlml.calstate.edu">http://seawater.mlml.calstate.edu</a> <a href="http://www.cencoos.org">http://www.cencoos.org</a> <a href="http://pubdata.mlml.calstate.edu">http://pubdata.mlml.calstate.edu</a>
Notes	All sensors are sited in a to the raw seawater line drawing water from 16- 36.8025° N, 121.7915°
Contact	Thomas Connolly
Email	<a href="mailto:tconnolly@mlml.calstate.edu">tconnolly@mlml.calstate.edu</a>
ProjFocus	Physical/Biogeochemical
<a href="#">Zoom to</a>	

# Carbonate Complete Assets

## Legend

### California/Oregon OAH Inventory Point Asset Type

- Sample Site
- Shoreside Sensor
- Cruise Station
- Mooring
- Other



# West Coast OAH Monitoring Inventory

---

## Next steps

- Incorporate additional monitoring information from WA, AK, and BC
- Work with partners to host this information online
- Lead federal/state discussion to define gaps and opportunities

**Outcomes of inventory will help OPC prioritize monitoring gaps and funding decisions**



# Monitoring OAH in MPAs

# International Agreements

---



**International Alliance to  
Combat Ocean Acidification**

Alliance brings together jurisdictions to highlight ocean acidification as a threat to coastal economies and ocean ecosystems in their region, and consider solutions

- › Members include: countries, states, provinces, counties, cities, Tribes and First Nations, universities, nongovernmental organizations, industry associations, businesses and other parties



# 3. Recommendations for further actions

1. Action item today to approve funding for California's Ocean Acidification Action Plan
2. Come back at future meetings (starting with April 2018) with additional actions and funding requests
3. Bolster support to state and federal agencies to assist in how they consider ocean acidification in their management and regulatory practices







Photo: Aaron laferriere



Thank you!

*@OPC\_California*

*www.opc.ca.gov*