

# WORKSHOP AGENDA

## Harmful Algal Blooms and California Fisheries: Science Advisory Team Working Group

10:00 AM - 5:00 PM  
Monday, June 27, 2016  
2201 Broadway, Second Floor Conference Room, Oakland, CA

### Attendees

**Working group Members:** Dave Caron, William Cochlan, Raphe Kudela, Gregg Langlois

**Ocean Science Trust:** Hayley Carter, Emily Knight, Tom Maloney, Errin Ramanujam

**Ocean Protection Council:** Jenn Phillips (afternoon)

**Remote Participants:** Vera Trainer, Robert Dickey (afternoon)

### Workshop Goals

- Clarify the State's existing HAB and biotoxin monitoring procedures
- Gather information about what is being monitored and by whom (independent and state supported)
- Gather information about independent scientific programs, tools, science that could be linked to State needs
- Begin conversation about how to better bridge the gap between science being conducted and science needed by the State
- Set up initial, science-based, questions to be addressed in advance of and following the August 10 legislative hearing

### Agenda

- 9:30 AM**                      **Coffee and pastries**
- 10:00 AM - 10:20 AM**      **Introductions and Overview of Project Scope & Goals for workshop**  
Errin Ramanujam and Hayley Carter, Ocean Science Trust
- 10:20 AM - 12:00 PM**      **OPC-SAT Working Group Discussion: State of the Independent Science on West Coast HABs**  
This group will begin to lay out the capacity already within the scientific community and how they are thinking about HAB events along the coast of California. We will begin by focusing the discussion on the following questions:
- **State of the science:** What is our current understanding of harmful algal blooms, biotoxins, and species responses given changing ocean conditions?
  - **Overview of independent monitoring programs, tools, and networks:** What are the current academic monitoring programs, tools, data sets and online networks/portals that the State might want to know about or draw from?
  - **Horizon scanning:** What are the emerging toxins and HAB species, as well as other impacted species or habitats that the State should be thinking about going forward?
  - **Developing a comprehensive HAB monitoring network:** In an ideal world, how would the State be monitoring, studying, managing, and responding to HAB events? What science is needed to support that ideal world?
- 12:00 PM - 12:30 PM**      **Lunch Break**
- 12:30 PM - 12:40 PM**      **Morning Recap - revisiting goals and scope**  
Errin Ramanujam and Hayley Carter
- 12:40 PM - 1:30 PM**      **Overview of the State's existing HAB and Biotoxin Programs**  
Gregg Langlois, California Department of Public Health, Interagency HAB Task Force
- We will hear about the current HAB and biotoxin monitoring and methodologies employed by the State. This presentation and discussion will allow us to better understand how the State is currently thinking about HAB events and monitoring.



**1:30 PM - 3:00 PM**

**Leveraging Independent Science to Support the State**

Moderator: Errin Ramanujam

Taking the morning's discussion about the status of the science from within the scientific community and the previous discussion about what California is monitoring currently, we will begin exploring how we can better link and bridge the gap between independent science and the needs of California state managers.

**Addressing gaps between government and science**

- What are current knowledge gaps in the State's existing HAB and biotoxin monitoring programs?
- How do we better link innovative research to support State needs?
- What scientific tools, information, or capacity is needed to better address management needs?
- Where should the State focus limited resources?

**Moving away from being reactionary: Predictive modeling efforts**

- What does that allow us to do that you can't do now?
- How can the state use this information?
- What are the knowledge gaps and science needs?
- How do current modeling efforts consider additional stressors of interest to the region, such as ocean acidification and hypoxia?

**3:00 PM - 5:00 PM**

**Reporting out: Project Deliverables (short term) and Next Steps (longer-term)**

Based on the discussions earlier, we will use the last portion of the day to begin to take pen to paper and draft any scientific responses to FAQ questions, determine if there are others this group can address, and outline a long-term working group scope. We will also discuss immediate next steps for the following:

- Presentation: August 10 Joint Committee on Fisheries and Aquaculture hearing
- "Frequently Asked Questions" science communication product
- Final report