

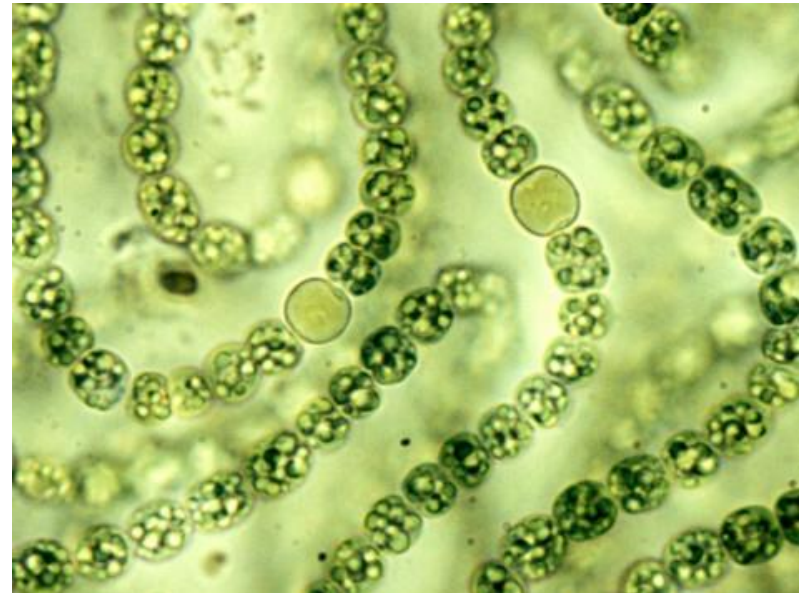
# California CyanoHAB Network



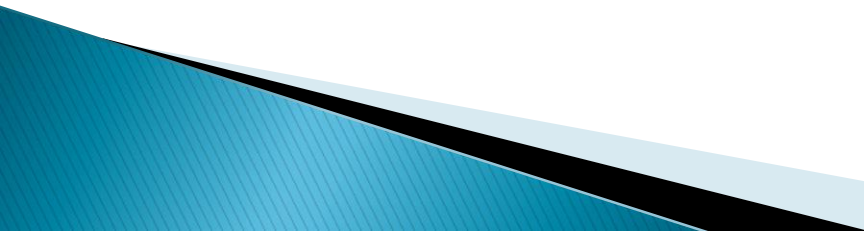
A Workgroup of the California  
Water Quality Monitoring Council

# Mission of the CCHAB Network

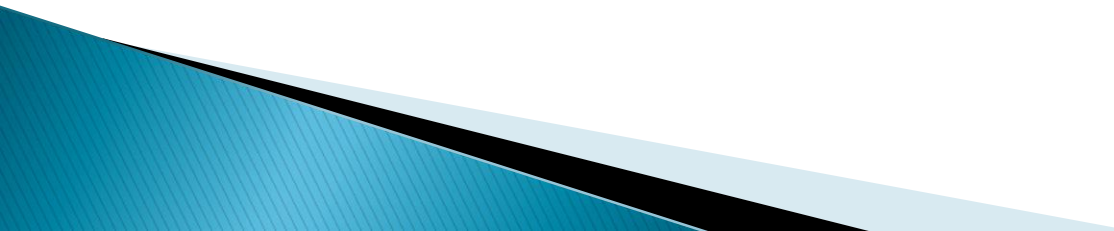
The mission of the CCHAB Network is to work towards the development and maintenance of a comprehensive, coordinated program to identify and address the causes and impacts of cyanobacteria and harmful algal blooms (HABs) in California.



# Brief History

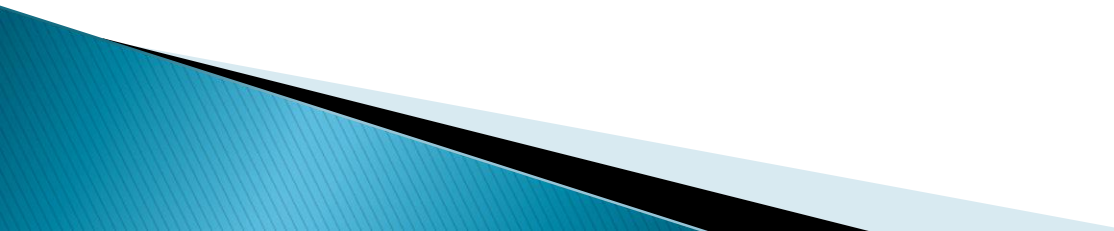
- ▶ Severe blooms on the Klamath reservoirs
  - ▶ Severe blooms at Pinto Lake
  - ▶ Lack of:
    - State & federal standards
    - Leadership
    - Programs
    - Understanding of the toxicology and related threats
  - ▶ Development of a working group of affected parties
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# What is the CyanoHAB Network?

- ▶ Developed originally in 2006
  - ▶ Promote coordination, monitoring, and management of harmful algal bloom
  - ▶ Coordinated network composed of federal, tribal, state, regional, and local agencies
  - ▶ To develop a statewide framework to address cyanoHABs in California's freshwater ecosystems.
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# Who are CCHAB Members?

## ▶ Coordinated efforts

- Tribes
  - Water Boards
  - CDPH
  - OEHHA
  - US EPA
  - Some water managers and local agencies (city and county)
  - Fish & Wildlife laboratories
  - Researchers
- 

# Accomplishments

## ▶ Products

- 2008 & 2010 Draft Voluntary Guidance
- 2012 –OEHHA Report on Suggested Action Levels for Blue Green Algae Toxins (Cyanotoxins)
- 2016 Guidance Document Updates
  - Decision Tree & Narrative
  - CyanoHAB Trigger Levels to protect human health
  - Signage
- Web portal

## ▶ Coordination and Reporting

- Improved coordination
- Online reporting and bloom tracking

# Coordination with SWAMP Efforts

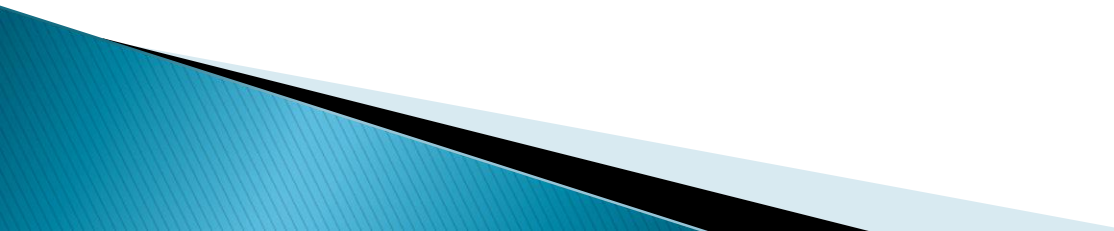
- ▶ Education & Public Awareness
  - Trainings (through SWAMP)
  - Media
  - Public Inquiries
  - Web site
  - Web Portal

# Next Steps

- ▶ Complete the 2016 Voluntary Guidance Document Updates
- ▶ Better education & outreach
- ▶ Better coordination with both State and local agencies to respond to blooms
- ▶ Identify long-term resources and funding mechanisms to implement & maintain program
- ▶ Support SWAMP efforts
  - Bloom identification
  - HABs contact list



# Challenges

- ▶ Inconsistent response to blooms
    - Difficulty identifying the lead
    - No uniform triggers
    - No coordinated communication protocols
      - Who needs to be notified & when?
  - ▶ Limited education and outreach
  - ▶ Inconsistent messaging
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# Challenges – continued

- ▶ Incomplete roster of participants
- ▶ Lack of resources
  - Funding
  - Staff
- ▶ Need a coordinated and comprehensive program (may require legislation)

# Suggested Solutions

- ▶ A formal, funded State Program that brings together the many agencies with roles in addressing HABs
- ▶ Sampling program
- ▶ Mandatory uniform response to blooms
- ▶ Dedicated resources to education and outreach efforts
- ▶ Research to better understand blooms
  - When and where they are likely to occur

# Water Quality Monitoring Council

## How can the Monitoring Council help?

- Support efforts toward:
  - A statewide coordinate program for dedicated staff resources
  - Resources for sampling and tracking blooms
  - Triggers for posting water
  - Reporting
  - Public notification
- Facilitate coordination with state and local agencies
- Support research to address and prevent blooms

# Upcoming events

- September 29, 2016 – Next CCHAB Network Meeting



# Questions and Comments

