Harmful Algal Blooms and Cyanotoxins

Possible Monitoring Council Workgroup Formation
Concern of Multiple Workgroups

- Safe-to-Swim Workgroup
  - Swimming safety
- Bioaccumulation Oversight Group
  - Bioaccumulative risk to humans, wildlife
- Safe Drinking Water Workgroup
  - Toledo, Ohio d.w. system shutdown from Lake Erie HAB
- Ocean Workgroup Roadmap
  - HABs identified as high priority issue
- Healthy Streams Partnership
  - Link with nutrient pollution
Welcome to My Water Quality

This web portal, supported by a wide variety of public and private organizations, presents California water quality monitoring data and assessment information that may be viewed across space and time. Initial web portal development concentrates on four theme areas, with web portals to be released one at a time. Click the Contact Us tab for more information.

The Monitoring Council seeks to provide multiple perspectives on water quality information and to highlight existing data gaps and inconsistencies in data collection and interpretation, thereby identifying areas for needed improvement in order to better address the public's questions. Questions and comments should be addressed through the Contact Us tab.

IS OUR WATER SAFE TO DRINK?
Safe drinking water depends on a variety of chemical and biological factors regulated by a number of local, state, and federal agencies. [Future Portal]

IS IT SAFE TO SWIM IN OUR WATERS?
Swimming safety of our waters is linked to the levels of pathogens that have the potential to cause disease. More >>

IS IT SAFE TO EAT FISH AND SHELLFISH FROM OUR WATERS?
Aquatic organisms are able to accumulate certain pollutants from the water in which they live, sometimes reaching levels that could harm consumers. More>>

ARE OUR AQUATIC ECOSYSTEMS HEALTHY?
The health of fish and other aquatic organisms and communities depends on the chemical, physical, and biological quality of the waters in which they live. More>>

WHAT STRESSORS AND PROCESSES AFFECT OUR WATER QUALITY?
Beneficial uses of our waters are affected by emerging contaminants, invasive species, trash, global warming, acidification, pollutant loads, and flow. [Future Portal]
California CyanoHAB Network (CCHAB)

- Formed in 2006
- Mission –
  Develop a statewide framework to address CyanoHABs in California’s freshwater and marine ecosystems
CCHAB Goals

- Coordinate monitoring, and management of CyanoHABs and effects in freshwater and marine ecosystems throughout California
- Develop collaborative relationships among entities responsible for addressing cyanobacteria concerns and impacts to beneficial uses
- Make efficient use resources to address cyanobacteria concerns by sharing information, avoiding duplicative efforts, promoting research, monitoring, and assessment, identifying technical and policy gaps, and communicating cyanobacteria concerns to the public
CCHAB Participants

- State and Federal Agencies —
  State and Regional Water Boards, OEHHA, CDFW, CDPH, DWR, USEPA, USGS, USFWS
- Tribal Governments — Karuk, Yurok
- County Health Depts. — Siskiyou, Humboldt, Del Norte
- Cities — Watsonville, San Mateo
- Academics and Researchers —
  UC Davis, UC Santa Cruz, MLML, SCCWRP, SFEI
- Utilities — Metropolitan Water District, PacifiCorps
CCHAB Accomplishments

- Draft voluntary guidance about harmful algal blooms
- OEHHA report on Suggested Action Levels for blue green algae toxins (cyanotoxins)
- Two trainings on HABs identification and sampling
- Funded:
  - Water quality investigation on Klamath River Reservoirs
  - Development LC-MS/MS cyanotoxins analysis methods
  - Sea Otter poisoning cases near Monterey Bay
  - Nonpoint source project for Pinto Lake
Other Collaborators

- **SWAMP – 3 year project**
  - Coordinate with NOAA to use satellite imagery to detect cyanobacteria blooms
  - Develop standard tools for field sampling and laboratory analysis of cyanobacteria & toxins
  - Training for field samplers, health & safety, ID
  - Fund limited analysis of cyanotoxin samples

- **SWRCB, Division of Drinking Water**
  - California Harmful Algal Bloom Monitoring and Alert Program (CalHABMAP)
  - Water Board nutrient policy development
Proposal

Ask CCHAB to:

- Become a Monitoring Council workgroup
- Consider strengthening ties with other collaborators
- Develop a portal under
  What stressors and processes affect our water quality?
- CCHAB meeting on December 18