## California Cyanobacteria Harmful Algal Bloom Network July 21, 2021, 9:00 am to 12:00 pm

### Virtual Meeting Minutes

#### WELCOME, INTRODUCTIONS, ANNOUNCEMEMENTS, ETC.:

- California Water Quality Monitoring Council (CWQMC) <u>YouTube Page</u> has past meeting recordings
- HABs Portal has been challenging to keep announcements updated due to lack of staff capacity. Subscribe online to receive updates by email regarding activities of the <u>California Cyanobacteria and Harmful Algal Bloom Network</u> under the General Interests tab.

# WATER BOARD FHAB PROGRAM INFRASTRUCTURE AND MONITORING UPDATE (MARISA VAN DYKE):

- Presentation begins at 7:12 on the Meeting Recording
- Infrastructure updates
  - Updates on funding, 2021 legislative report, FHAB monitoring Strategy
- Monitoring
  - Pre-holiday assessments
  - Water Board special studies
- Program implementation plan
- Changes/Themes of CA FHABs Portal
  - Where are HABs?
  - How to stay safe?
  - How are advisories issued and communicated?
  - How to collect samples?
- Comprehensive Recommendations Report of incidence, response, monitoring, and mitigation to FHABs coming July 2022.
- FHAB Monitoring Strategy has been posted.
  - Contains full report, executive synthesis, and fact sheet.
- Memorial Holiday Assessment
  - 24 different waterbodies sampled
  - 110 sites updated on Web map
- 4<sup>th</sup> of July Holiday Assessment
  - 16 different water bodies sampled
  - 165 sites updated on Web map

## Water Boards led monitoring

Region	Targeted Water Body	Scope (1-2 year studies)
Central Coast	Priority watersheds + coastal confluence	Integrate HAB monitoring into Central Coast Ambient Monitoring Program (CCAMP); routine sites approx. monthly
Central Valley	Hensley and H.V. Eastman Reservoirs	Targeted HAB monitoring study to collect samples along transect in open water + shoreline sites year- round
Central Valley	Delta waterways	Microcystis sp. source tracking study; partially funding study in coordination with Delta RMP
Lahontan	Tahoe Keys Lagoon	Multi-year partnership with Tahoe Keys POA to study laminar flow aeration mitigation management
Lahontan	Red Lake	Multi-year partnership with Alpine Watershed Group to study a HAB impacted lake in relatively undisturbed watershed

# BENTHIC SOURCE TRACKING OF CYANOBACTERIAL BLOOMS IN THE DELTA (ELLEN PREECE):

Presentation begins at 54:56 on the Meeting Recording

- Microcystis first detected in 199X
- Generally dominated in the delta
- Not clear where blooms originate
- Certain locations are more prone to blooms, cells deposit into sediments in late fall.
- At least 10 Microcystis strains within the delta
- Hypothesis
  - Overwintering *Microcystis* from few specific locations are source of CHABs in distant but hydrologically connected locations
  - By spring, little *Microcystis* biomass will remain in sediments of flooded island sites/channels to serve as bloom inoculum
  - Peripheral sites will carry high seed stocks into the spring and are primary sources of *Microcystis* in the southern/central Delta
- Project overview
  - Sediment cell abundance
  - Water column cell entry
  - Molecular fingerprinting
- Water Summary
  - Temperature similar across sites

- Highest spring water column concentrations at Discovery Bay/Stockton
- $\circ$   $\,$  Lower concentrations at Mildred even through high seed stocks

### **REGIONAL COORDINATORS REPORTS:**

Reports begin at 1:41:05 on the Meeting Recording

- Please reference the **HAB Incident Reports Map** for updates on HAB incidences.
- RB1: north coast benthic cyanobacteria report (2016-2019 data)
- RB2:
  - EB Parks: Lake Anza Hypolimnetic system; Lake Temescal nanobubbler, PAK27, and alum; Del Valle Caution; Quarry Lake improving over the summer; Big Break at Danger
- RB3: visual assessments; Pinto Lake
- RB4: no report
- RB5:
  - Clear Lake: Lyngbya dominant (last time 2009), outreach and social media on HABs
  - o Delta
- RB6: mostly special study sites
- RB7: Salton Sea (mostly mats) and Wister Wildlife area
- RB8: Lake Evans (fish kill), Big Bear Lake, Lake Elsinore, San Bernardino County Parks
- RB9: Lakes Henshaw and Morena
- Stronger connection with safe to swim group recommended

### SUBCOMMITTEE REPORTS:

- Reports begin at 2:04:30 on the Meeting Recording
- Statewide Guidance Subcommittee
  - Kicking off this fall
- Web Portal Architecture Subcommittee
  - Agency contacts remain updated
- Education and Fact Sheets Subcommittee
  - o No Update
- Monitoring and Assessment
  - $\circ \quad \text{No Update} \quad$
- Data Subcommittee
  - $\circ$  No Update
- Mitigation Subcommittee
  - o Talks on mitigation as state parks and Elsinore sediment removal
- Wildlife Impacts Subcommittee
  - Updated Webpage