California Cyanobacteria and Harmful Algal Bloom (CCHAB) Network March 29, 2021, 9 AM to 12 noon

Recorded meeting is available at the following link: https://youtu.be/e2ID36BTk2Y

Identified Participants:

Beckye Stanton, OEHHA; Sarah Ryan, Big Valley Band of Pomo Indians; Angela De Palma-Dow, County of Lake Water Resources; Erick Burres; Beverley Anderson-Abbs, State Water Board; Susan Keydel, EPA Region 9; Karola Kennedy, Water Resources Manager; Hal MacLean, East Bay Regional Park District; Steven Rhodes; Keith Bouma-Gregson, State Water Board; Rich Booth (retired Lahontan Water Board staff); Dylan Stern, Delta Stewardship Council; Sabrina Sexton, East Bay Regional Park District - Water Management Division; Erin Swanson, Water Research Foundation; David Caron, University of Southern California; Steven Rhodes, Fresno County Dept of Public Health, Environmental Health; Tyler Sullivan, California Coastkeeper Alliance - Monterey Region; Damian Ebert, Pacific Power, Klamath Program Manager; Jayme Smith, Southern California Coastal Water Research Project; Grant Johnson, Karuk Tribe; Greg Ford, Phytoxigene

Announcements:

- Clear Lake cyanoHABs have resulted in a DDW requirement for cyanoHAB monitoring in raw and finished water for the 18 public drinking water systems (May-October plus specific triggers during winter months)
 - \circ Biweekly raw and finished water sampling at surface water Public Water Systems from May 1 October 31. Raw results at or greater than 0.3 μg/L results in weekly sampling
- Meetings have been scheduled for the rest of the year:

SPRING: March 29, 2021
SUMMER: July 21, 2021
FALL: October 27, 2021
WINTER: January 19, 2022

Interstate Technology Regulatory Council <u>HCB Guidance Document</u> Now Available, <u>Live Training</u> 4/29/21

- Strategies for preventing and managing Harmful Cyanobacterial Blooms Guidance Document now available.
- Provides various tools
 - Nutrient Reduction tool
 - Monitoring Tool
 - Management Criteria Tool
 - Risk Communication Tool
- Guidance provides overview, how to use the guidance, introduction to cyanos, monitoring, strategies for communications and response planning for HCBs, management and control strategies, strategies for use in nutrient management, and recommendations

Regional HAB Coordinators HABs Updates:

- Please reference the HAB Incident Reports Map
- R1
- Planktonic HAB at Tule Lake, saxitoxin detects USFWS planning ongoing monitoring
- Big Lagoon bloom with low level MCs

- R2
- EBRPD Danger at Lake Anza and Quarry Lakes, Caution at Lake Del Valle, may open for swimming on Memorial Day
- R3
- Monterey/Seaside estuarine HAB with visible filaments in bay; signage provided and recent sampling; planktothrix bloom – non toxic strain
- R4
- No update
- R5
- No cyanoHAB confirmations yet
- o Follow up on initial dog illness report from Brannan Is, no cyano visible
- Clear Lake winter monthly monitoring with 1 site at Warning for MCs in Feb and Microcystis, Planktothris, Lyngbya; change to Caution for MCs in March
- R6
- Lake Gregory initial dog illness report, no cyano visible
- o Tahoe Keys laminar flow study starts this month
- Sabrina Rice as new HAB coordinator
- R7
- No report
- R8
- o Special study pilot end of May, start study in June, Lake Elsinore and Big Bear Lake
- R9
- No update
- Statewide
 - BCP with additional funds and HAB coordinator positions (April/May for remaining spots), expand lab contract
 - FHAB monitoring strategy finalized
 - o 3 pre-holiday sampling events this year
 - o Planktonic general awareness and advisory signs still available via FHAB program

2021 CCHAB Network Meeting Topics

- Lake Tahoe Keys mitigation
- Mini-summit on fires and HABs
- SDAM USEPA model

Microcystin Accumulation in Shellfish: Implications for Native Species and Human Health" – Dr. Ellen Preece, Senior Limnologist, Robertson-Bryan, Inc.

- Please reference recorded presentation at the 00:47:05 mark
- Mussels and blue crab accumulate MCs in previous studies
- Current study on MCs and STX in clams with potential exposure to sturgeons
- Sample 2X/month June-Oct, 1X/month Nov-May, STX 3 dates per year
- ELISA and LC-MS/MS, crayfish as whole body
- Also doing MC source tracking in the Delta

Turning up the heat: Implications for managing wildfire and climate change impacts on long-term phosphorus in a large, shallow hypereutrophic lake" - Angela De Palma-Dow, Program Coordinator, County of Lake Water Resources Department and "Do Lakes Feel the burn? A continental-scale

perspective on lakes and wildfires" - Ian McCullough, Research Associate Data-intensive Landscape Limnology Lab, Michigan State University, East Lansing, MI.

- Please reference recorded presentation at the 01:26:59 mark
- 53% of Lake County burned in the last 5 years
- Phosphorous as key nutrient in Clear Lake per TMDL
- 3 lake arms very different
- Pre/post fire data for 1981, 1996, 2018 including TOC increase post-fire; can affect drinking water treatment by-products
- Delta Science Program proposal re: wildfire and Delta watersheds
- Days with anoxic events July-Oct
- Case study in CA 4th climate change assessment report
- Low winter precipitation and warmer temps with identified drought periods and increased phosphorous
- Sediment cores and sediment nutrient data forthcoming
- Lagos and Landsat satellite for fire history in watersheds across the US

Illness Workgroup Update

- 2020 HAB Related Illness Report Submitted to CDC OHHABS
- Working on getting previous year's data and getting web page updated
- CDC put out OHHABs summary report for 2016-2018
- To report an illness, go to the HAB Portal Bloom Report page

Mitigation Subcommittee Update

- Group is transitioning as Carrie Austin steps down from Chair and Hugh Dalton steps up
- Looking for lakes for preliminary evaluations
- Two mitigation presentations were given to the group which may be offered to the CCHAB network
 - Diverted post fire sediment to avoid discharge into lake Elsinore, presentation was on that diversion and impacts to the lake
- All CCHAB Members are welcome to tune in to the April 20 presentation

Statewide Guidance Subcommittee

No update