

CCHAB Network Meeting
June 30, 2016

Monitoring Council HABs Initiative

- Monitoring Council (Council) wants to foster a unified HABs group consisting of ambient, marine, and drinking water HABs.
- The Council wants to identify data gaps, funding, and to figure out why there is a lack of coordination between groups such as between CCHAB and HABMAP.
- General question is what is currently not being done to address harmful algal blooms
- Karen Larson is executive sponsor of HAB project.
- Email Jon Marshack for ideas on what is needed to develop the HAB Initiative.
 - Dry scum toxin levels
 - Aerosolized toxins
 - Communication/data sharing between organizations
 - Water supply/drinking water
- HAB project will include everything: wildlife, Drinking Water, Etc.
- Greg Ford recommended the article "[High incidence of liver cancer near waterbodies with frequent blooms](#)".
- Clear Lake and the California Environmental Health Tracking Program have submitted a proposal for an NIH grant to look at emergency room visits and medical claims to correlate these with bloom periods.

EPA Criteria

- June, 2015, the US EPA published 10-day drinking water health advisories for microcystin and cylindrospermopsin in drinking water.
- The values were made only for finished drinking water (taken out of a tap) and not for recreational waters.
- The two values used were for young children and adults. It is estimated that children 6-10 years of age have the highest exposure rates to microcystin and cylindrospermopsin.
- 10-day period means that the water managers have 10 days to decrease levels below the advisory level before health warnings are sent to the public. This criterion is not a rule or regulation.
- US EPA is developing recreational ambient water quality criteria for cyanotoxins and cells.
- Cells and cyanotoxins affect the body differently and should be considered separate from each other. Consumption of fish and shell fish will NOT be included in these criteria.
- Fish tissue is not tested regularly for cyanotoxins creating a data gap between fish consumption and cyanotoxin association. There is a data gap in fish consumption as tissue of fish is not tested regularly for cyanotoxins.
- EPA is currently working on incorporating estuary/freshwater/marine interface.

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- Anatoxin-a was not included because there is not enough peer reviewed data to include Anatoxin-a.
- Saxitoxin may be a future addition to the US EPA criteria list.
- Risks to pets will be described in the criteria.

Subcommittees

- Carolyn Ruttan inquired about the possibility of creating a mitigation subcommittee
- Add Joshua Hanthorn Defenders of Wildlife added to Wildlife subcommittee
- Each subcommittee needs to create a work plan outlining their goals and a timeframe for reaching those goals.
- Coordinate with other subcommittees.
- Reach out to non-CCHAB members for information.

GUS subcommittee

- Working on signage, lots of people want modifiable signs.

Web portal subcommittee

- Planning to meet soon, others subcommittees need to think about how they want their information put on the web portal.

Education subcommittee

- Developed google drive folder to compile information, most on vet outreach thus far.
- Right now focused on pets and the hope is to develop fact sheet for vets and pet owners.
- Have reached out to vets across the state.
- Is it possible to give fact sheet to lake managers to pass out at waterbodies? Yes – the subcommittee will develop a distribution plan to include lake managers.

Monitoring subcommittee

- ADD: Karen Taberski, Rich Fadness, Marisa Van Dyke, and Sara Ryan
- Standard Operating Procedures guide is delayed due to contracting.
- Satellites are not sending data down yet, data should be available in August.

Wildlife subcommittee

- Not started yet
- Possibly reach out to wildlife rehabilitation centers for information.

Bloom Updates:

- East Bay Regional Parks Districts– K. Taberski

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- Blooms have been reported.
- Applied Phoslock to bloom but Microcystin bloom is still growing.
- Going to apply PAC 27 now.
- Is there a protocol for lysing blooms so down-stream Beneficial Uses of Waterbodies are not affected? - The waterbody manager must apply for an NPDES permit. The protocol for it (use of an algaecide) can be written into a general NPDES permit. It may also be regulated under Section 403-404 of the Clean Water Act
- Is there a recommendation or guide for people to learn about PAC 27 or other chemicals used to control HABs?
- If it (use of an algaecide) is in an NPDES permit can the waterbodies just use the chemical anytime?
- There needs to be some sort of guidance for water managers in regard to use of chemicals/mitigation measures for HABs.
- Clear Lake – S. Ryan and K. Kennedy
 - Most testing has shown *Anabaena* in the lake.
 - Monitoring using test strips and samples sent to the Richmond USEPA laboratory.
 - No Anatoxin-a has been detected so far this year.
 - The dam is releasing water constantly into Cache Creek.
- Upper Klamath – D.Ebert
 - Oregon side of Klamath Lake is exceeding health levels.
 - California side is still mostly clean.
 - Copco cove is posted at the Caution level due to microcystin but it is not clumping together yet.
 - Iron Gate is posted at the Caution level but downstream (Klamath River) is still clean.
- Mid Klamath – D. Ebert
 - Still good. Going to use SPATT bags in 27 location along river (SPATT bag = resin that absorbs toxins for two weeks to see if toxins are present)
- Russian/Eel River – R. Fadness
 - Using SPATT bags until the 27th of August.
 - Rivers are still doing well.
- Region 5 – B. Anderson-Abbs
 - Lake Britton has been blooming regularly with 2-3 possible cyanotoxin associated dog deaths a year in the past several years. The lake is not monitored for toxins.
 - Pitt River tribe is concerned about Cyanotoxins.
 - Chico
 - Homeowner Association lake is blooming very badly.
 - Monitoring will not be done by the State since this is a private lake. There may be possible issues with Cyanotoxins going down-stream.
 - A small private lake in Sacramento may be experiencing similar problems with HABs
 - A KOA campground in West Sacramento has a bloom that is not being monitored

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- Thompson Lake, in Northern CA may have a bloom. RB5 out of Redding will be getting water samples on July 7.
- DWR State Water Project (does not include the Delta)- B. Sakata
 - Pyramid Lake has low levels of microcystin.
 - No field testing has been done yet.

CDC – OH HABS

- One Health Harmful Algae Bloom System (OH HABS) is used as a post-facto bloom event indicator only, not for routine monitoring.
- For local, state, and territorial public health partners to voluntarily report to the Centers for Disease Control and Prevention (CDC).
- The system uses the National Outbreak Response System (NORS) to input information into OH HABS, but there are very few NORS reporters in California
- We will need to figure out how to input information into the OH HABS system.
- Training will be available in July or August but there has not been an official date scheduled yet.

Charter

- B. Anderson-Abbs suggested maintaining “Cyanobacteria AND Harmful algal blooms” in title to encompass all harmful algal blooms including golden algae.
- Add “ecosystem shift” and “water quality issues” to the needs section of charter.
- How do you add marine HABs? – They have different players, possible coordinate with HABMAP in the future. It was recommended that marine HABs not be added but make coordination with CalHABMAP an objective.
- CalHABMAP is, or could be, a sister organization and coordination with them needs to be in the goals section of the charter.

Signage Field Testing

- The second round of testing will be completed in July, about 3 weeks.
- Possible problem with having more than one sign is that it is labor intensive to constantly change out the signs as levels of toxins/cells change in the water body.
- Is it possible to collect all the modified signs at the end of the bloom season so we can see what people really want on their signs?

HABMAP

- Harmful Algal Bloom Monitoring and Alert Program (HABMAP); <http://www.habmap.info/> is the California Marine focused HAB network. The FDA regulates toxins from marine HABs especially in seafood (mostly crustacean and shellfish).
- Links to HABMAP information should be put on the website.

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- There is a HAB model that predicts blooms of *Pseudo-nitzschia*, the causative organism of domoic acid, located on the CeNCOOS website (<http://www.cencoos.org/data/models/habs>).

Action Items

- One week should be provided for changes to the charter before it's sent out again.
- Email Jon Marshack possible data gaps in HAB information.
- Links to HABMAP information should be put on the website.
- Add members to requested subcommittees.
- Subcommittees meet and pick a leader.