

California CyanoHAB Network (CCHAB Network) Meeting

Draft Notes

April 13, 2017

9:00 am – 3:00 pm

Coastal Hearing Room, 2nd Floor CalEPA Building
1001 I Street, Sacramento, CA

Welcome and Introductions:

Approval of Previous Meeting Notes:

- Meeting notes approved from January 26, 2017 meeting
 - There was suggested grammar corrections before posting.
 - There was a motion to approve and a second.

Subcommittee Updates

- **Statewide Guidance Subcommittee – TBD**
- **WEB Portal – Architecture Subcommittee – Jon Marshack**
 - It was noted that there was an appreciation of the “Before Heading Out” document on the My Water Quality Portal
- **Education & Factsheets Subcommittee – Reggie Linville**
 - Focus has been on the veterinarian fact sheet/guide – a practical guide to use when animals come in poisoned. This has been reviewed by OIMA, US EPA and veterinarian experts and is very close to being complete. RL indicated there will need to be a next task. SK asked if the CDC veterinarian fact sheet was considered. Reggie indicated that CCHABs is more expansive and include additional diagnostics. It was requested that this be posted on the webpage/portal <http://www.mywaterquality.ca.gov/habs/index.html>
- **Monitoring & Assessment Subcommittee – TBD**
 - Beverly Anderson was previous lead; Ali Dunn will be now, as well as Sarah Ryan.
- **Data Subcommittee – Marisa Van Dyke**
 - No updates at this time.
- **Mitigation Subcommittee – Carrie Austin**
 - No updates at this time but we will be discussing the mission and goals of this group after the EPA/SWAMP HAB meeting.
- **Wildlife Impacts Subcommittee – Reggie Linville**
 - Met on Feb. 29th – work to create a budget for analysis. Connect Fish and Wildlife managers with Water managers – focus is on hot spots. Include information to everyone in a particular area. e.g. Clear lake, information should be made available to others. PG&E is interested in this too. Focus for now, could use more help, lots of small things to do, trying to set up.
 - Jon Marshack – wildlife impacts portal is on the website and he’d like their information.
 - Sarah Ryan – what information are you considering.

- Reggie – said there is not good communication between wildlife biologists, water managers and researchers. However its difficult when funds are limited.
- Sue Keydel – connect a few things – Betsy (US EPA) has been building relations in Clear Lake, collecting animals for urine, blood, serum analysis and working with Fish and Wildlife. After webinar on April 5th request for fish or shell fish analytical methods available. National level studies to connect the dots are being done.
 - Susan Fricke – samples or results ? Sue Keydel – just contact me and she'll connect the right people. Susan Fricke – asked if there were samples? no.
- Sarah Ryan – Communication and coordination is very important. Hoping that cyanotoxin awareness is increased CDFW biologist and water managers is very important. The connection of the dots should be happening at the regional/local level. Wildlife deaths, call this number, community didn't know what the number is. They receive calls all the time and there is not a good coordination between wildlife deaths and those animals getting to the lab and information on what to do with the samples, who collects and are they being preserved correctly, after driving for 3 hours? What is this the correct collection and storing method ? Lots of work to be done in this sub-committee. US EPA is involved, not everyone.
- Sue Keydel – the project that the State, EPA and Fish and Wildlife is not ready to go public but will when it's ready. Reggie said that would be great to have.
- There seems to be a disconnect, lacking a system between Fish and Wildlife to respond and work with the wildlife sub-committee.

Proposals for other subcommittees – All

- No other subcommittees suggested.
- There will be a 2 ½ day training for marine and coastal HABs April 25-27. Day one is focused on marine HABs, days two and three are focused on freshwater HABs. Session topics include monitoring overview and examples, management and mitigation with source water treatments and drinking water. This will take place at the Southern California Coastal Water Research Project facility in Costa Mesa; CA. Registration link is available on the HAB portal.
- Sue Keydel is not proposing a subcommittee but she would like to see more people share what they see going on/happening around the state. Add as a standing item on the agenda. It needs to include others and not just Regional Boards.
 - Jon Marshack suggests to develop a communication strategy. Whom do we contact when something happens, a matrix of contacts and procedures? Assemble all that information and then put on portal.
 - Funding is being considered to create this list.
 - There was a concern about the regional board list not updated. There was concern about the contact list to be updated. More inclusion of non-regional board. Fresh water HABs and regional board contacts into one list.

SWAMP HAB Program's Field SOPs – Marisa Van Dyke

- Update on HAB field SOPS – funded by swamp. Present HAB field guide – include SOP and more. Link on swamp website.
- This issue has been gaining attention, SWAMP works collaboratively with CCHAB on implementing the overall strategy to address HABs in CA and has been part of this work group since the beginning.
- Infrastructure in document. 7 components – satellite imagery, centralized website and reporting system, event response guidance docs, labor resources, training education, applied research and tool development, outreach.
- The SOP is located on the HABs web portal on the My Water Quality web page.
- SWAMP California freshwater harmful algal bloom field guide can be downloaded. Pre-made forms for targeted monitoring. Visual guide is coming soon, trying to prioritize to get this done. Each chapter is printable, short and easy to take them out into the field.
 - First chapter. Sampling from edge and in a boat.
 - Second is site reconnaissance sop – collect information about the site for posting or de-posting sites.
 - Making observations and measurements in the field. Field sheets and chain-of-custody forms are available in pdf and excel and are printable. Helps to collect CEDEN ready information.
 - Visual guide to observing blooms – distinguish between non-toxic nuisance blooms and toxic cyano blooms
 - Field microscopes – used to id organisms in field, field fluorometry chlorophyll-a and phycocyanin.
 - Field toxin detection test kits – microcystins, cylindrospermopsin and anatoxin-a. SOP is not ready for these yet. It will also explain how to use the kit and also what to do with these, timing of samples, freezing samples if it's going to take a long time to get back to the lab. It was suggested that the monitoring subcommittee could possibly tackle the use of test strips.
 - The SOP would also include how to use that data in the field.
 - Collecting samples for lab analysis – toxin sample collection, microscopy sample, fluorometry – coming soon – being reviewed and will be posted. Surface water and algal mats. Targeted monitoring, submit samples for analysis, lab based for dominate and pigment extracted.
 - Laboratories – download list of labs able to perform services.
 - Interpreting the data and Posting Advisories.
 - Cyanobacteria – chart and known toxins – download available – USGS – to id dominant genera found in bloom.
 - Guide to interpreting the lab report – guide common lab test – coming soon.
 - Submitting data to swamp – so we can share in a centralized database. Swamp will take on data so that it can be uploaded. Central Environmental Data Exchange Network. It's very important to share your data. Satellite imagery will be laid over, so it's important to have ground information to correlate.
 - Alana from Region 6 asked if there would be any training on how to use SOP?

- There is discussion on creating training.

Introduction of new SWAMP HAB staff – Ali Dunn

Outcomes from HAB Off-Season Workshop – Ali Dunn

- Summarize outcomes from CHAB– rankings – background – workshop in the off-season, spreadsheet circulated with recommended actions, not all participants provided ranking of actions.
- Coordination and outreach.
 - *Incident response # 1*
 - *Portal*
 - *Cyano HAB monitoring and assessment strategy*
 - *Continued o/e on HAB resources – to the regions and other agencies*
 - *Sarah asked are these the rankings/priorities of tasks.*
AD – yes, number that came up the most often and average
- *Guidance documents and sops*
 - *Regional incident response plans template*
 - *Lab analysis (pros/cons with technology and lab costs/ben vs. analysis – which method to use to answer which questions)*
 - *HABs contacts master list – map based soon*
 - *Sue Keydel asked if that would other agency contact information?*
 - *Jon Marshack – yes, but funding was not made available*
 - *Toxin data*
 - *Signage*
 - *Press release template update*
- *Incident map*
 - *Include toxin data*
 - *Add feature to report end of bloom – color changes (MVD)*
 - *Include capability to report bloom*
 - *Include contact information*
 - *Improve description of map purpose*
 - *Jon Marshack – issue with getting it projects here at SWB – Tablo. GIS limited in staff, so OIMA is looking for other ways to get this done and staff up to speed.*
- *Reporting form*
 - *Provide a simple way to add additional information to an existing bloom info*
 - *Include photos to demo extent of bloom or appearance of bloom*
 - *Link to bloom watch – revised reporting form – it’s an app you can download – so you can take pictures and upload pictures/info in real time and feed into our system*
 - *Meredith Howard – at the training – how close are we to getting this done and should I discuss this ?*
 - *Jon Marshack – called CyanoScope contractor to put CA in to the app and that would happen in the next update but not sure when that will be. SWAMP would be notified when uploads are entered.*

- Focus on a CCHAB citizen monitoring efforts as a future CCHAB meeting agenda topic in July meeting?
- Portal enhancements
 - *Add sampling and lab resources*
 - *Better visibility of sampling*
 - *Conduct a user survey*
 - *Improve navigation and search features*
- Jon Marshack said that some of these things have been done and there are still things that need to be done.
- Establish water quality objectives for one or more incidents
- Going down the list, which ones will be done this year?
 - Ali will be looking into this, looking at resources and determining what can be done, we will need to rely on network members to help accomplish.
 - Is this going to be deciding what gets done? How are we working together?
 - CCHAB has a team and Ali will look to these people to get some of these done, swamp also has some resources dedicated to accomplishing others.

Regional Reports on Current Blooms, Monitoring or Bloom Event Response Prep for 2017

- **RB-1**
 - Update E/O and helping with statewide training. Visual monitoring, trainings.
 - Challenges focus is on benthic river blooms in the Russian River and Eel River.
 - Lessons learned: many species in rivers that prefer fast moving water. Mycrosytin 2nd challenge. Rivers are species which producing high levels of anatoxins. Toxins present in samples entire time. No protocols for sampling in streams/river. Need to a way to notify about river toxins. Kids and dogs in rivers are an issue.
 - Eliza samples from Russian River were dyhydro
- **RB2**
 - Not much to contribute yet, but talking to state parks to report their toxic blooms. Most blooms have resolved.
- **Clear Lake**
 - Task force meeting in May to discuss sampling season. Cell ID, cyanotoxin analysis , every site, every time. Field strip kits, levels are lower from last year. If they see higher levels, then they might do something different. Fish/shell fish tissue samples will be taken throughout this year. Coordinating with Fish and Wildlife, getting it organized. Working with Big Valley around the lake and working with water coordinators and recreation. There are 17 water purveyors on the lake and we are encouraging working together.
- **Bend Genetics**

- Tracking down grab samples from Klamath. Anatoxin genes found in benthic. Working on molecular assays. Single cell not colonizing microcystin.
- **SWAMP**
 - No updates
- **WQMC**
 - This is last meeting Jon Marshack will have with this group. This has been a high priority for the Water Quality Monitoring Council.
- **CDFW**
 - Working through the comments from OIMA for lab SOPs. Funding is being reduced for analysis. Working on developing CCR.
- **RB5**
 - Sac office has responded to a bloom in Manteca. Fresno staff SWAMP person has left and new staff to be hired and trained. Put together contact info for satellite. Looking to do more outreach on responding and keeping communication lines open with State Board.
- **Pacific Corp**
 - Public health sampling to begin in June, adjustments to sampling, dropping cell counts, sampling to continue to all sites with sampling partners.
- **Meredith Howard**
 - Asked if anyone from RB8 was on the phone – no. Lake Elsinore has had a toxic bloom throughout the winter. Gearing up for more sampling this year. Come to the HAB meeting April 2017.
 - Marine HABMAP Update: CeNCOOS has a forecasting model for domoic acid and Pseudo-nitzschia (link here: <http://www.cencoos.org/data/models/habs>)
 - SCCOOS has a new Executive Director, Clarissa Anderson.
 - Southern CA is currently experiencing a domoic acid event, as there has been an influx of marine mammals and an unusual bird mortality event.
- **Citizens Monitoring Group and RB4**
 - Eldorado bloom, Elsinore bloom, putting together videos for citizen monitoring
 - Has aerial photography been developed yet? No, did not get the funding to do this. Coordinating with Great Lakes area on aerial photography. Will talk about this at the workshop later in April 2017.
- **RB6**
 - Alanna recently took over this project and working with Mary. Getting people trained to respond, no one from Victorville office yet, next steps is getting emergency response team ready.
 - Jon Marshack suggested the training include portal information.
- **SFEI**

- Working on satellite imagery from 2011-2012. Two fact sheets to be developed by end of the month for swamp, difficulties cross walking data in WQX, not a lot of data in CEDEN and difficult to get other groups to share data. There is a problem with uploading if the data is already in WQX/CEDEN, you end up with duplicate or triplicate information. Should be a way to add filter to data, so that this does not happen. Will work with data services.
- **OEHHA**
 - There will be an In person only workshop “Evaluating the State of the Science” May 4th at UC Davis.
 - Will it be recorded ? No
- **RB9**
 - No longer doing the analysis with Dan (CDFW?), thrown for a loop, working to get other lab contracts. Reaching out to non-profits and water managers so they are aware of the portal.
 - Just RB 9 lab contract or all of the swamp monitoring for CDFW?
 - Dan – work in already existing samples or new?
 - No, new.
 - JM – SWAMP is working on alternatives.

Future Agenda Item Suggestions and Associated Meetings Dates

- Jon Marshack Retiring – May 2017
 - Much appreciation and Thanks for everything!
 - Job posting for his replacement to be posted soon.
 - Who is replacing Jon and what will their marching orders be?
- Marisa VanDyke
 - Kick off meeting in May – field sampling and emergency sampling kits
 - Cases of dog illness and death please contact the state water board through the instant reporting form, goes into the email box, make sure to check – some cases we’ll be able to pay for testing to determine if it was cyano toxin. Case by case decisions for funding these tests.
 - Korean Four Rivers project to put IN dams for cyano/water quality, in comparison with our Klamath efforts in removing them. Mycroystins sludge will cost approximately 22 trillion dollars to remove sludge behind Korean dams.
- Future Agenda Item Suggestions
 - Have all participants report out
 - Presentation from Eric – fall
 - What CCHAB research – MVD – Summer 2017– used to have academics in our group and need to work to have them participate again

- Mitigation Subcommittee – What to focus on?
- Data formatting – separate or during meeting
- Communication Strategy – anyone to help
- Field test kits results – MVD – Fall 2017
- Pinto Lake Alum Treatment presentation – Fall 2017 or should it be after the treatment has been performed?
- Eel/Russian Benthic – will check back – Fall 2017
- Presentation on DNA - Anatoxin piece, summer 2017 ask Tim Otten
- Yurok Tribe presentation to inform on the sustenance not recreational – work together to put something together to provide statewide information
http://www.waterboards.ca.gov/about_us/public_participation/tribal_affairs/docs/bu_outreach.pdf
- Biostimulatory/Biointegrity – ask Jessie Maxfield to bring topic for an update
- Moving our meetings towards more of updates than sub-committees unless they have something important.