

AHAB Monthly Call – December 10th, 2020

Participants: Rosie Masui (KBNERR), Thomas Farrugia (AOOS), Kimberlee Beckmen (ADFG), Racheal Lee (NSHC), Bill Carter (USFWS), Chelsea Kovacsik (CRRRC), Carol Brady (ADEC), Caroline van Hemert (USGS), Danielle Gerik (USGS), Dean Stockwell (UAF), Dominic Hondelero (Kasitsna Bay Lab), Evie Fachon (WHOI), Gay Sheffield (AK Sea Grant), Ginny Eckert (AK Sea Grant), Grace Ellwanger (KANA), Hallie Brown (KANA), Jasmine Maurer (KBNERR), Jeff Hetrick (Alutiiq Pride), Julie Matweyou (AK Sea Grant), Karie Holtermann (City of Unalaska), Kevin Heller (ANTHC), Lori Verbrugge (ATSDR), Maile Branson (Alutiiq Pride), Marc Suddleson (NOAA), Michelle Morris (ADFG), Matt Smith (USGS), Molly McCammon (AOOS), Jill Prewitt (AOOS), Darcy Dugan (AOOS), Natalie Monacci (OARC), Robb Kaler (USFWS), Sarah Schoen (USGS), Sean Crosby and Suzanne Torian (Kachemak Shellfish Mariculture Association), Andie Wall (KANA)

Update from Thomas - AHAB Coordinator

I have met with over 30 tribal organization, state and federal agencies, researchers, environmental coordinators and outreach coordinators over the last month, and have received some really wonderful insight. The next step for me will be to take those inputs and use them to update the draft AHAB action plan, which we will circulate around for comment once it has been revised.

I've also been working on the AHAB Steering Committee, hopefully we can meet in January and that will help direct some of the more specific actions of the network, including the working groups.

The notes from these calls will now be posted on the AHAB website, along with the date and time of the next meeting. We will also invite participants to show a slide or two during their updates during these calls in the future. This is not mandatory but some visuals (maps, graphs, pictures) could be helpful. These slides will be added to the notes as well for anybody on the phone.

Question from Gay Sheffield: Objective of AHAB as a whole, when we're working on other projects or with communities, what is the mission of AHAB?

Answer: The mission is to increase coordination in monitoring, research, awareness, event response for HABs in Alaska. We will work on a data portal as well so there is a central access point for publicly available data on HABs in Alaska.

ROUND ROBIN UPDATES

Chandra Poe – Qawalangin tribe (email update)

1. Results from analysis funded by Bruce Wright of Knik Tribe came back, confirming extremely high PST this summer in blue mussels. All samples from the collection site were over the recommended consumption threshold from May 5 thru August 21, with a peak of 7,140 micrograms/100g from samples collected 7/10/2020.
2. Analysis under NOAA Event Response funding is also completed for September and October, for multiple blue mussel sites on Unalaska and for one butter clam site and one blue mussel site at King Cove.

- a. The PST totals for mussels collected at all Unalaska sites are under 80 micrograms/100 g for all samples collected in September and October
- b. The PST totals for butter clams from King Cove are over the recommended threshold (143 in Sept; 126 in October)
- c. The PST totals for blue mussels from King Cove are under 80 micrograms/100 g for samples collected in September and October

Other updates from Unalaska are that the community has experienced multiple cases of community transmission of COVID in the past couple weeks and moved to a High alert status. This means schools have moved to remote learning and the community is in a hunker down situation for the time being.

Kathi Lefebvre – NOAA WARRN-West (email update)

For my ECOHAB update, we are working on manuscripts summarizing Saxitoxin and Domoic Acid levels in the Food Web from 2019 cruises.

Food web samples include, phytoplankton, zooplankton (including isolated krill and copepod samples), clams, worms, and fish collected Summer 2019 from the Beaufort, Chukchi, and Bering Seas.

Question from Dean: there was a mortality in Dutch Harbor, and there used to be a Sea Grant MAP agent out there, but we have lost that person, so I would suggest that we discuss putting another agent out there as soon as possible to fill that role, and that conversation should be had.

Answer from Ginny Eckert: I welcome that suggestion, and we would love to do that, but the Sea Grant budget has been cut in half in the last 6 years due to declines in state funding. However, we are working with the tribe and supporting their efforts. And they are stepping up and taking more of a leadership role. So, it's really great to see the community stepping up and Chandra is coordinating that and they're actually recruiting a new person to work with the tribe to do that.

Naomi Bargmann – Sitka Tribe

Things have kind of settle down, things are pretty quiet here. But lots of rain and wind so we've had massive flooding, I'm sure you've all seen the dramatic pictures from Haines. It's just been one storm after another, which is good for mitigating HABs and our shellfish toxin levels, but not so good for the communities.

Hoonah PST levels was in 2500 micrograms per 100g in September. Just tested sample from Nov 15 and it was still over the limit. That's the latest one they've tested there; the only site showing that trend in 2020. Butter clams hold onto PSP and don't let go. Still have pretty high values in Ketchikan, Juneau, and Hoonah. Highest was in Juneau testing at 440 micrograms per 100g. Now on a stretch that is a little drier. No snow, it's been in 50's.

Ginny Eckert – Alaska Sea Grant

No HAB update, but Sea Grant is looking for host for state fellowship program. Opportunity for state/federal/tribal/nonprofit organization to host a fellow. It's getting down to the wire to let the students know, so please let Ginny know this week if you are interested.

There will be an AK Sea Grant RFP hopefully coming before Christmas. ASG releases call for proposals every two years. HABs are an important issue to the state of Alaska.

Michelle Morris – ADFG

She has been passing on the word to other growers about this network so maybe we'll be hearing from them. It's good to increase connections and farmers might be able to take samples in remote locations.

Jeff Hetrick – Alutiiq Pride Shellfish Hatchery

Maile is our new science director here, and we are in the process of setting up the lab for bio toxins and marine sampling.

Maile Branson – Alutiiq Pride Shellfish Hatchery

Working on building out HAB monitoring program. Will get started this spring; currently in listening and learning phase. Plan to start collecting data in February.

Julie Matweyou – Alaska Sea Grant

Not actively sampling right now, will be going out soon for sediment collection soon.

Grace – KANA

KANA has been collecting bi-weekly, but no major updates yet.

Andie Wall – KANA

New staff at KANA to help continue outreach and expand work they're doing. Looking at the next funding cycle to assist the tribe on Kodiak meet their subsistence needs.

Rosie Masui – KBNERR

We're working on annual reports. They produce them at the end of each season, main audience is community monitors and local partners but always happy to share (feel free to reach out). Goal to get them out before the holidays.

In lower Cook Inlet, the razor clam fishery on the east side has been closed for some time. This used to be a popular recreational harvest opportunity – thousands of people would harvest. This is up for review with ADFG board. That meeting is scheduled for March, and the local ADFG office said they are looking to open that harvest opportunity again in some capacity. In the past DEC had done some testing off and on for a couple of years. KBNERR has been working with ADFG to do toxin testing when they do abundance surveys. KBNERR is now looking to host workshop or training at beginning of May after those decisions have been made to connect with people about that fishery – what past usage was like and what we're looking at moving forward. KBNERR will be primarily working with local partners, plus Jerry and Dan in WA and OR who have a lot of experience managing for toxins in razor clams. If people are interested in

joining, please reach out to Rosie. Rosie will be taking 3 months off starting in January so is trying to get things done ahead of time.

Dominic Hondelero – Kasistna Bay Lab

Still doing monthly oceanographic and HAB monitoring surveys in Kachemak Bay, trying to get out between storms during the winter. We are planning on continuing these surveys, and hopefully starting up our NPRB project again next summer, to look at HAB toxins in the food web. Were able to get minimal samples last summer, but because of COVID couldn't get as many as we wanted.

Carol Brady – ADEC

There have not been any PSP events in commercially harvested shellfish.

Sarah Schoen – USGS

Getting protocols ready, plans for summer sampling for the biogeography and foodweb projects. Lab has been closed for quite a while with covid, but once the 2019 samples are back, they will be able to analyze them.

Matt Smith – USGS

Wer're just finishing processing 2020 die-off samples they received, sent out some updates but didn't seem like there was a whole lot going on with those samples. Most of the samples were from the Bering Strait region. They should have that finished up soon. Hoping to get things ready for 2021 projects and getting into the field.

Lori Verbrugge – Agency for Toxic Substance and Disease Registry

No real updates except to introduce myself. We are a public agency, sister to CDC. We are more of a data user than producer, but wanted to thank everybody that is producing this data, and testing for PSP. It's critical public health work and we really appreciate it.

Molly McCammon – AOOS

No updates, just monitoring the budget, hopefully it will get funded so we can continue our work!

Kevin Heller – Americorps Vista at ANTHC

ANTHC had good meeting with Thomas last week. We work with tribal communities in rural Alaska on brownfield sites, and technical assistance for tribes applying for grants. We talked about how can the contamination support program at ANTHC play a greater role in AHAB. Their program has purchased drones and is going through drone training. They could offer drone resources/staff to the AHAB network.

They are also creating a youth environmental education handbook that could include HABs in relation to water quality and food security.

Darcy: you can try connecting with Katie Gavenus who has talked about HABs K-12 education material.

Kevin: Thanks! A lot of people are doing youth outreach or education in the state; ANTHC is hoping to form a group to help boost pathways for youth to great careers.

Robb Kaler – USFWS

No updates, just here to introduce self and listen. Seabird biologist at USFWS. Interests in birds that are starving, might be starving because of exposure to HABS, and making them more susceptible to other diseases. There was a wildlife health bulletin earlier this week on avian influenza, so tracking that as well.

Kimberlee Beckmen – ADFG

There is a wolf pack on Pleasant Island off coast of Gustavus, and they have eaten all the ungulate prey; now feeding on sea otters and mussels. One particular female wolf had tooth damage from feeding on mussels. Her liver during necropsy looked like it had damage from toxins, she had diffuse liver necrosis. She'd like to run some samples on the liver and/or brain to learn if HABS were involved from eating otters or mussels. Maybe chronic exposure? No urine in the bladder and brain was too deteriorated for histo-pathology. The animal died in early November. She thinks the exposure was chronic but would like to investigate. The wolf pack is dying out on the island so they're pretty much starving to death. So would there any way of running those frozen samples for HABS, who would be the best person to collaborate with on this?

Rosie: Kimberlee could email Thomas and Rosie and she can connect her with people that could test it. Noted past report of brown bears with similar symptoms – and seizures but we didn't have samples at that point.

Caroline van Hemert: We can help coordinate too and chat with Kathi Lefebvre, and can probably run the sample as well.

Dean Stockwell – UAF

No updates, just standing by in case something pops.

Natalie Monacci – UAF OARC

Here to introduce self and learn more about the different groups involved in HABS. There are groups in Alaska co-monitoring OA and HABS in Alaska. Willing to provide more data to share with groups that are interested.

Karie Holtermann – City of Unalaska

Worked a little with Missy, now working with Chandra at the tribe. Will be helping her do some monitoring in Dutch Harbor.

Racheal Lee – Norton Sound Health Corporation

No updates on HABS, been absorbed with COVID activities, but working on getting a basic lab set up for phytoplankton monitoring. Working with Chris Whitehead to do a training for internal staff and iGAPers in 15 villages in the region to see who else is interested. So far minimal interest other than Diomedes. Diomedes is doing a blue king crab project; the lead might join next month's call.

They also have a position open to help do some of the HAB and environmental work. If you know of anyone interested in moving to Nome and doing this type of work, they are recruiting. Emma Pate is their current environmental coordinator, can introduce herself next month.

Gay Sheffield – Alaska Sea Grant

No news of HABS from Nome. For sea ice, a bit of a delay. It's being created right now but currently on the Arctic scale there is less ice than the record year of 2012.

Question about all the runoff and sedimentation going into the water in Southeast – is that better or worse for HABs? With these big environmental changes, is someone looking at this? We're having these grand environmental changes in our backyard (less ice for us, rain for Southeast), and it would be great to keep monitoring the impact that has.

Naomi: Skagway monitoring is on hold because they can't get to their beach due to landslide. Naomi thinks it's more about habitat changes than changing the structure of the plankton community. All the freshwater does create a lens at the top of the water. There are multiple sites around SE so they will be able to watch the data in the coming months. Currently, very low levels at almost all of the sites.

Bill Carter – USFWS, Selawik Wildlife Refuge in Kotzebue

Fish biologist at refuge. Has been the facilitator for project that Alex Whiting started on the blooms around Kotzebue. Looped into a prof at Columbia University (Ajit). They're looking at an algae bloom from last summer. Not shellfish issues but blue-green algae in the freshwater system. On the call today to hear from others.

Dean: Alex had been collecting blue green algae and toxins. Is Alex still working on that and have data from his spat bags shown anything? Can you give me an update on those studies.

Bill: Alex still working on this; not sure of status. Refuge has a couple of sondes to put out, but Bill is just a facilitator with some equipment. Dean and Alex will connect.

Evie Fachon – WHOI

Evie was on cruise aboard Sikuliaq from Seward, up to Chukchi and Beaufort. Didn't get as far east as they planned because ice came in. Did a lot of HABs sampling on the Chukchi shelf. Collected sediment samples to look for Alexandrium cysts, and bivalve and invertebrate samples for Kathi's ECOHAB project, as well as genomic tissue. Don't have data yet but will report back after they get the samples analyzed.

Marc Suddleson – NOAA NCCOS

No updates from NCCOS, just keeping an eye on the budget. It's great to hear all the new voices and new groups getting entrained so that's really nice progress in a short time. Happy Holidays!

NEXT AHAB MONTHLY CALL WILL BE: THURSDAY JANUARY 14TH, 2021 AT 9:30AM AK