Kachemak Bay Research Reserve Phytoplankton Update
July 10th to July 16th, 2020
Harmful Algal Bloom Program
Rosie Masui 907-235-1598 rmmasui@alaska.edu
Jasmine Maurer 907-235-4799 jrmaurer@alaska.edu

Hello Everyone,

We have a lot to report out on this week.
We are saddened to share that the Alaska Department of Health and Social Science (DHSS) has issued a Public Service Announcement due to a recent death in Alaska from Paralytic Shellfish Poisoning. The full announcement is attached to the weekly email. Please take a few minutes to read this announcement, it includes important information from DHSS and resources regarding the harvest of wild shellfish in Alaska. As always you can contact us with questions as well, and Rosie has set up **virtual** office hours this Friday, July 17th, 9 to noon to take questions over the phone. KBNERR's office is still not open for in person visitors, so please reach out via phone: **907-235-1598** or email: jrmaurer@alaska.edu or rmmasui@alaska.edu

We also have results to share from our wild shellfish toxin testing program. The wild blue mussels came in well below the regulatory limit; however, the toxin level in the butter clams was near the limit considered safe for consumption. We will continue to monitor wild shellfish and report out results as they become available to us.

Date	Shellfish Type	Location	Toxin Tested For	Toxin Testing Result
6/23/2020	Blue mussels	China Poot	Saxitoxins-PSP	Below regulatory limit.
6/23/2020	Butter Clams	China Poot	Saxitoxins-PSP	Below regulatory limit.

Commercially harvested shellfish are monitored by DEC and considered safe for consumption.

Throughout Kachemak Bay phytoplankton are numerous this week and we are seeing an increase in diversity; in other words, more species present in each sample. This week all our samples had species of concern present, and we saw abundant levels of *Pseudo-nitzschia* sp. in several sub-bays. *Pseudo-nitzschia* sp. can produce domoic acid, which can lead to Amnesic shellfish poisoning when toxic shellfish are consumed. Science is still researching what triggers *Pseudo-nitzschia* sp. to begin producing domoic acid, at this time testing shellfish is the best way to know if toxins are being accumulated.

Rosie will be hosting **virtual** office hours on Friday, July 17th, from 9am - 12pm to answer any questions via phone at **907 - 235 – 1598.**

Thanks to all our monitors and partners for the phytoplankton samples!
Rosie Masui & Jasmine Maurer

Kachemak Bay Research Reserve Phytoplankton Update
Qualitative Analysis Phytoplankton Data

INNER BAY

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
7/9/2020*	China Poot	10	32	Mixed Diatoms & Dinoflagellates	Present	Present	Present
7/9/2020*	Bear Cove	12.5	-	Tintinnids	Present	Present	None
7/12/2020	Peterson Bay	11.1	30	*Pseudo-nitzschia*	Present	Present	Present
7/14/2020	Halibut Cove	15	25	*Chaetoceros* sp.	Present	Present	None
7/15/2020	Homer Harbor	13.9	25.8	Sparse Sample	Present	Present	None

*Samples received after last weekly update

OUTER BAY

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
7/15/2020	Kasitsna Bay	12.7	30.5	Mixed Diatoms	Present	Present	None
7/15/2020	Jakolof	12.5	30.7	Mixed Diatoms	Present	Present	None
7/15/2020	Tutka Bay	12.4	28.7	Mixed Diatoms	Present	Present	Present
7/15/2020	Sadie Cove	12.9	29.3	Mixed Diatoms	None	Present	Present
7/15/2020	Eldred Passage	12.9	28.3	*Chaetoceros* sp.	Present	Present	None
7/15/2020	NW Yukon Island	12.3	29.3	*Chaetoceros* sp.	Present	Present	Present

*Samples received after last weekly update

Kachemak Bay National Estuarine Research Reserve
Alaska Center for Conservation Science
University of Alaska Anchorage